

# **Maricopa County 2017 CCHNA: Community Health Status Report**

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# **Maricopa County 2017 CCHNA: Community Health Status Report**

## **Overview**

The Office of Epidemiology at the Maricopa County Department of Public Health (MCDPH) reviewed multiple data sources to collect and analyze health behaviors at the National, State, and County levels to understand the health of our community and to provide supporting data for the Coordinated Community Health Needs Assessment (CCHNA) for Maricopa County. This report provides data to support the Community Health Status Assessment which is one of the four primary components of the Mobilizing for Action through Planning and Partnerships (MAPP) process and helps to identify health indicators, barriers and resources to consider within Maricopa County. Important health indicators reviewed include communicable diseases, births, causes of deaths, and causes of hospitalizations. There is also data on behavioral factors such as smoking, exercising, and healthy eating.

To complete this process MCDPH created a workgroup by asking the Health Improvement Partnership of Maricopa County (HIPMC) and the Maricopa County Community Health Needs Assessment Collaborative (MCCC) for volunteers that had knowledge of epidemiology methodologies, public health program planning, and social science. This data collection piece allowed MCDPH officials and stakeholders to assess public health problems as part of the CCHNA and for the Community Health Improvement Plan (CHIP). The CHIP is defined by the Public Health Accreditation Board as a long-term, systematic effort to address public health problems on the basis of the results of the community health assessment activities and the community health improvement process. The plan is generally updated every three to five years and is used by health, governmental, and human service agencies to collaborate with community partners to set priorities and target goals.

## **Background**

The Epidemiology Expert Workgroup (EEWGG) was comprised of 19 community stakeholders holding various positions such as managers, coordinators, supervisors, directors, evaluators, specialists, professors, and epidemiologists from different organizations/agencies who met between March and June of 2016. The EEWG group met through a series of nine meetings for the epidemiology data review. Prior to beginning the project, each member of the workgroup was debriefed and received a general understanding of the Coordinated Community Health Needs Assessment (CCHNA) process and how their feedback will be used.

## **Methodology**

The EEWG reviewed over 153 indicators in 36 categories and scored each indicator on a scale of 1-5 based on that indicator's link to prevention as well as its importance to community health. If an indicator received an average score of 3 or higher during that review, it received a "Yes" on the Indicator Matrix for Data Support from the EEWG. If 50% or more of the indicators in a category received "Yes" marks then the overall category also received a "Yes" mark. This was necessary because much of the data reviewed by EEWG was extensive and granular, much more so than could be collected from any of the other data sources.

Health topics under consideration were grouped into categories based on topic, an individual category might have zero indicators and up to six indicators. These indicators were calculated from secondary data according to recommended practices; those with zero indicators were health topics which have been shown to be contributors to or outcomes of health behaviors but there is no available data source for our community. The health topic could still be identified as a priority by the community through one of the other data gathering

methods which is why they continued to be included for consideration. Information on each health topic was collected and consolidated across all of the data gathering and analysis mechanisms into one overall view, referred to as the Indicator Matrix. Four data gathering processes were considered: EEWG, community surveys, focus groups, and key informant interviews. These four processes were grouped into either Data Support (EEWG and community surveys) or Context Support (focus groups and key informant interviews) based on the representativeness of the data collected as well as its purpose. For example, the rate of deaths due to stroke as identified through death certificates was considered fully representative because all death certificates for Maricopa County were included in the data. However, if stroke came up as a significant theme in the focus groups, it was still important to include but likely did not reflect the concerns of the full community, as less than 300 people participated in the focus groups.

Three questions from the community surveys were included in the Indicator Matrix (see Appendix A): what are the three most important factors that will improve quality of life in your community, the three most important health problems that impact your community, and the three most important unhealthy behaviors seen in your community. The answer choices for each question were put in frequency order and the top 50% of responses received a “Yes” on the Indicator Matrix. The same questions were also broken down by demographic group based on race/ethnicity, special populations (LGBTQ, refugee, person with disability, Veteran, children with special healthcare needs), and age. If a health topic was in the top 50% of responses for three or more of these demographic groups then it received a “Yes” on the Indicator Matrix for Community Surveys Health Equity. An indicator could only receive one “Yes” for the Community Survey portion, either the overall or the health equity portion, not both.

Standard qualitative analysis methods were used to examine the focus group and key informant interview feedback (reports can be found at [HIPMC.org](https://hipmc.org)). Because the importance of a theme is already included within that analysis process, anything that was listed as a key theme on either of those analyses received a “Yes” under the corresponding heading under Context Support. Additionally, the community surveys filled out by professional organizational representatives were included with the Key Informant interviews.

The focus groups and key informant interviews were instrumental in understanding the context of the data being reviewed, but were not likely as representative of the community as the data indicators themselves or the community surveys. For instance, there were over 6,000 community surveys completed and only 12 key informant interviews. As a result, the final category scores were weighted. Each category received a point for each “Yes” on the matrix with the Data Support total (maximum value of 2) counting 60% towards the overall score and the Context Support (maximum value of 2) contributing 40%. The final weighted scores ranged from 0-2. Anything with a score of 1 or above moved on to the next stage of consideration, a total of 23 health topics.

## Data Sources

The following data sources were used to create the list of different indicators and categories. This data was used to present to the Epidemiology Expert Workgroup:

**Arizona Department of Public Safety's Crime in Arizona Reports** – The Crime in Arizona Report is an annual report compiled by Access Integrity Unit of the Arizona Department of Public Safety. The purpose of the report is to provide data regarding the nature and extent of crime throughout the State. The report provides vital information necessary to assist law enforcement agencies, government, and the public in their approach to crime in our state.

**American FactFinder & American Community Survey (ACS)** – Each year, the nationwide survey collects and produces information on demographic, social, economic, and housing characteristics about our nation's population. Over 3.5 million households across the country are contacted by the U.S. Census Bureau to participate in the ACS. Individuals can complete the questionnaire for their household either online or mailing a paper form. Data from the survey helps determine policymaking and the amount of funds distributed to states each year.

**Arizona Secretary of State** – The Arizona Secretary of State webpage provides information on voter's registration and historical election data, such as the number of registered voters and the turnout of Arizona's voters. Psychologically when it comes to voting, most Americans vote on an emotional act, rather than a rational one. Americans vote because it is a huge part to our civic duty, and we want to feel that we did our part. - It helps Americans feel connected to our community, and is likely to improve our self-concept.

**Arizona Youth Survey (AYS)** – The Statistical Analysis Center is a branch to the Arizona Criminal Justice Commission, and helps conduct the AYS to analyze and better understand Arizona's criminal and juvenile justice system. Youths participate in the AYS through Arizona schools across all 15 Arizona Counties. The AYS is conducted every other year, and collects drug use data from Arizona's 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders.

**Behavioral Risk Factor Surveillance System (BRFSS)** – One of the most powerful tool designed for targeting and building health promotion activities was established in 1984. BRFSS is the largest continuously conducted health survey system collecting data regarding health-related risk behaviors, chronic health conditions, and the use of preventative services. Each year, more than 400,000 adult interviews are conducted by telephone surveys. BRFSS data is collected in all 50 states, including the District of Columbia and three U.S territories.

**Centers for Disease Control and Prevention Data** – A CDC resource tool created to provide easier access to a wide range of chronic disease data, risk factor indicators, and policy measures.

**Children's Bureau, An Office of the Administration for Children and Families: Child Maltreatment** – The Children's Bureau partners with federal, state, tribal, and local agencies to improve the health and well-being of our nation's children and families. The Children's Bureau oversees matters related to child welfare, including abuse and neglect, child protective services, family preservation and support, and living situations including independent living, foster care, and adoption.

**Children and Youth with Special Health Care Needs (CYSHCN)** – Defined by the Maternal and Child Health Bureau, children to the age of 21 with special health care needs are those with medically complex health issues; chronic physical, developmental, and behavioral or emotional conditions. Children with special health care needs require additional health services that surpass the support needed by most children.

**FBI's Uniform Crime Reports** – The Uniform Crime Reporting (UCR) Program has been the starting place for law enforcement executives, students of criminal justice, researchers, members of the media, and the public at large seeking information on crime in the nation. The program provides enhanced data management tools for greater efficiency in data collection, processing and maintenance of crime data, automated processes, tailored reports on an as-needed basis, and a streamlined publication process that will give users quicker access to the data.

**Feeding America** – The concept of food banking, a response to alleviate the hunger crisis in America by providing food to people in need was developed in Phoenix, Arizona by John van Hengel. Today, Feeding America is the nation's largest domestic hunger-relief organization with a network of 200 food banks across the country. One of Feeding America's research in hunger annually analyzes the food insecurity in the United States by counties and congressional district.

**Hospital Discharge Data (HDD)** – Under Arizona State Statute, records of HDD collection is required for inpatient (IP) and emergency department (ED) visits from a majority of all licensed Arizona Hospitals, excluding Federal, military, Department of Veteran affairs, and Indian Health Services hospitals. Information from the HDD are used to analyze the patterns of care, public health, and burdens of chronic diseases and injuries morbidity.

**National Environment Public Health (EPH) Tracking Network (EPH Tracking)** – EPH Tracking is a surveillance system used to identify the environmental causes of chronic diseases by measuring and tracing the spread of hazardous substances over time and area. The environment includes our air, water, food, and surroundings. Hazardous substances includes, but not limited to carbon monoxide, air pollution, and lead.

**National Vital Statistics Reports (Volume 65, Number 5)** - Centers for Disease Control and Prevention (CDC), released an updated version of the National Vital Statistics Report. The report presents data on the top 10 leading causes of death in the United States by age, sex, race and Hispanic origin. Leading causes of infant, neonatal, and post-neonatal death are also presented. This report supplements "Deaths: Final Data for 2014," the National Center for Health Statistics' annual report of final mortality statistics.

**The Trust for Public Land (TPL)** – The TPL works to protect the places people care about and create access to close-to-home parks in cities where 80 percent of Americans live, ensuring healthy livable communities for generations to come. Annually, a City Park Facts Report is produced to provide data to the public including the number of parkland and park units per residents by the city, and the total spending on parks and recreation by city and adjusted for price of living.

**Youth Risk Behavior Surveillance System (YRBSS)** - YRBSS monitors the leading causes of death, disability, and social problems often established during childhood and early adolescence. In addition, YRBSS monitors the prevalence of obesity and asthma, health-related behaviors, sexual identity, and sex of sexual contacts. The survey is conducted to middle school and high school students every two years, usually during the spring semester.

## Mortality

Mortality rate is the rate of deaths or number of people who died within a population. Mortality data looks at the prevalence of diseases, how likely a particular disease is to be deadly, and if it impacts specific demographics. Mortality rates are represented by the number of deaths per 100,000 individuals per year unless otherwise noted.

The following table represents the top ten leading causes of all deaths in Maricopa County between 2011 and 2015. The data below shows heart disease being the number one leading cause of death, whereas, in 2015, cancer dropped to be the second leading cause of death. Chronic lower respiratory is the third leading cause, followed by Alzheimer's.

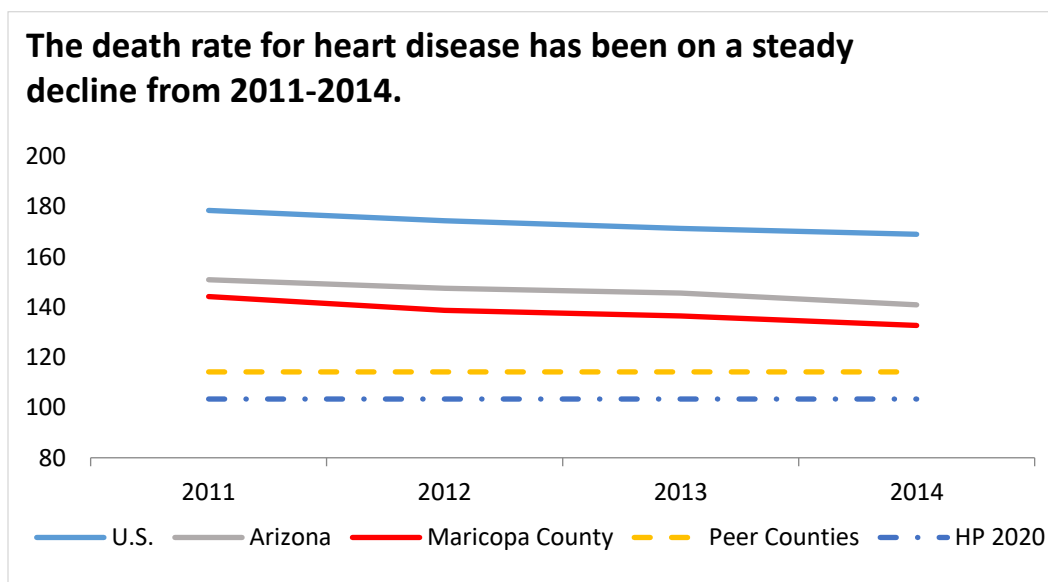
Maricopa County - Leading Causes of Death					
Rank	2011	2012	2013	2014	2015
1	Cancer	Cancer	Cancer	Cancer	Heart Disease
2	Heart Disease	Heart Disease	Heart Disease	Heart Disease	Cancer
3	Alzheimer's	Chronic Lower Respiratory	Chronic Lower Respiratory	Chronic Lower Respiratory	Chronic Lower Respiratory
4	Chronic Lower Respiratory	Alzheimer's	Alzheimer's	Alzheimer's	Alzheimer's
5	Stroke	Unintentional Injury	Stroke	Stroke	Stroke
6	Unintentional Injury	Stroke	Unintentional Injury	Unintentional Injury	Unintentional Injury
7	Diabetes	Diabetes	Diabetes	Diabetes	Diabetes
8	Suicide	Suicide	Suicide	Suicide	Suicide
9	Falls	Falls	Falls	Falls	Falls
10	Liver Disease	Liver Disease	Liver Disease	Liver Disease	Liver Disease

The table below represents the top ten leading causes of death for Maricopa County Youth (ages 0-18) between 2011 and 2015. Data shows pregnancy and early life related issues to be the number one leading cause of death. This includes pregnancies with abortive outcomes; complications occurring during pregnancy, labor and delivery (examples; respiratory distress, disorders related to short gestation and low birth weight); and congenital abnormalities (examples: Spina Bifida and Down's syndrome). Unintentional injury is the second leading cause of death, followed by the rising number of youth suicides.

Maricopa County - Youth Leading Causes of Death					
Rank	2011	2012	2013	2014	2015
1	Pregnancy and Early Life	Pregnancy and Early Life	Pregnancy and Early Life	Pregnancy and Early Life	Pregnancy and Early Life
2	Unintentional Injury	Unintentional Injury	Unintentional Injury	Unintentional Injury	Unintentional Injury
3	Cancer	Cancer	Cancer	Cancer	Suicide
4	Suicide	Homicide	Homicide	Homicide	Homicide
5	Homicide	Suicide	Suicide	Suicide	Cancer
6	Influenza and Pneumonia	Stroke	Cardiovascular Disease	Cardiovascular Disease	Cardiovascular Disease
7	Stroke	Cardiovascular Disease	Chronic Lower Respiratory	Chronic Lower Respiratory	Stroke
8	Cardiovascular Disease	Influenza and Pneumonia	Stroke	Stroke	Influenza and Pneumonia
9	Chronic Lower Respiratory	Chronic Lower Respiratory	Influenza and Pneumonia	Falls	Falls
10	Falls	Falls	Falls	Influenza and Pneumonia	Chronic Lower Respiratory

## Heart Disease

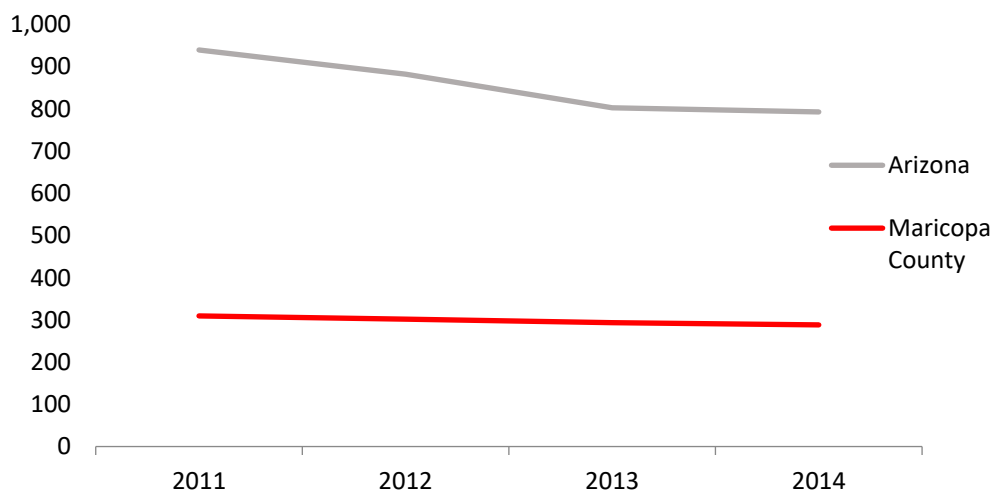
According to the 2014 National Vital Statistics Report from the CDC, the top leading cause of death in the United States is heart disease and is the second leading cause of death in Maricopa County. Data findings show that heart disease accounted for 614,348 deaths in the United States. The graphs below (2011-2014) are a comparison of deaths due to heart disease at the national, state, and local level. In general, deaths due to heart disease have been on a steady decline. (Herone, 2016)



(Office of Disease Prevention and Health Promotion, 2017), (Arizona Department of Health Services, n.d.), (Centers for Disease Control and Prevention, 2017)

Table: Death Rate per 100,000 Due to Heart Disease, 2011-2014				
	2011	2012	2013	2014
United States	178.5	174.4	171.3	169.0
Arizona	150.9	147.5	145.6	140.9
Maricopa County	144.2	138.7	136.5	132.7
Peer Counties	114.2	114.2	114.2	114.2
Healthy People 2020	103.4	103.4	103.4	103.4

## Hospitalization rates for Heart Disease is higher in Arizona than Maricopa County.



(Arizona Department of Health Services, n.d.)

Table: Hospitalization Rate per 100,000 Due to Heart Disease, 2011-2014

	2011	2012	2013	2014
Arizona	939.8	882.5	802.8	793.0
Maricopa County	309.5	301.9	293.5	288.3

## Cancer

According to the National Vital Statistics Report from the Centers for Disease Control and Prevention, the second top leading cause of death in the United States is cancer. In 2014, cancer accounted for 614,348 deaths in the United States. Cancer in Maricopa County had been the number one leading cause of death for five consecutive years until 2015 where it fell below heart disease. The graph below (2011-2014) is a comparison of cancer deaths at the national, state, and local level. National Cancer death rates average higher nationally than in comparison to the state of Arizona. When comparing Maricopa County and the state of Arizona, cancer death rates average equally. (Herone, 2016)

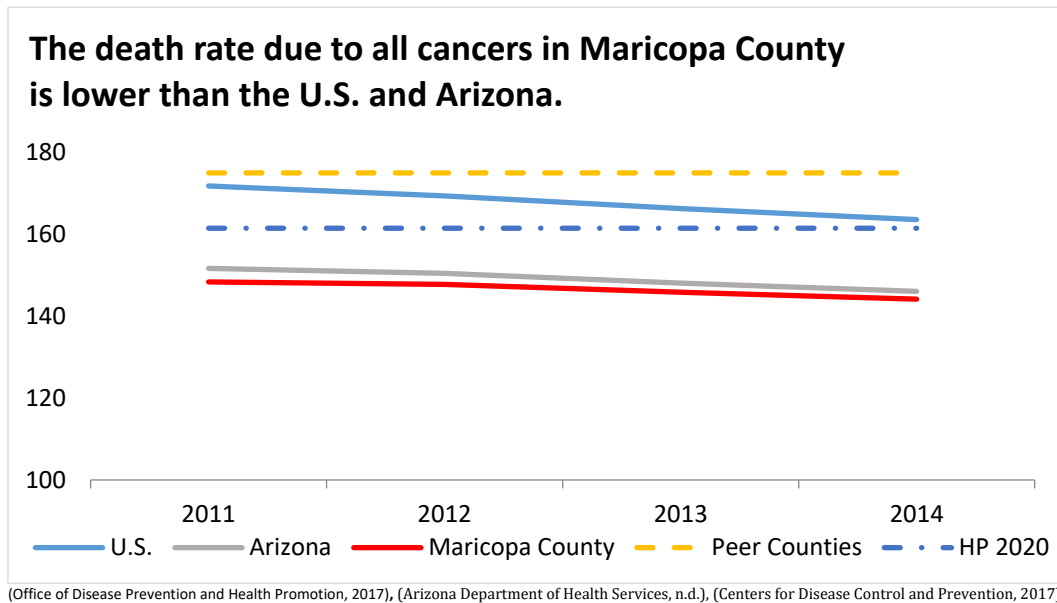
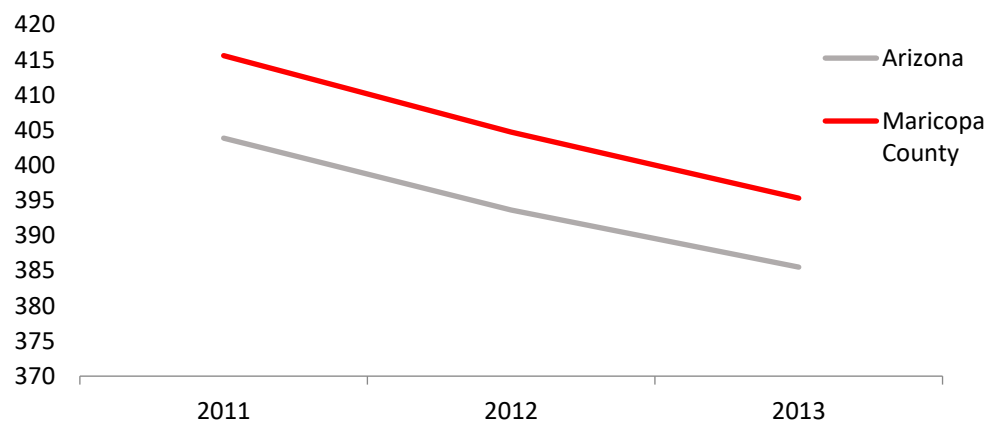


Table: Death Rate per 100,000 Due to All Cancers Combined, 2011-2014				
	2011	2012	2013	2014
United States	171.7	169.3	166.2	163.5
Arizona	151.6	150.4	148.0	146.0
Maricopa County	148.3	147.7	145.8	144.1
Peer Counties	174.9	174.9	174.9	174.9
Healthy People 2020	161.4	161.4	161.4	161.4

**The overall cancer incidence rate has declined in Maricopa County and Arizona.**

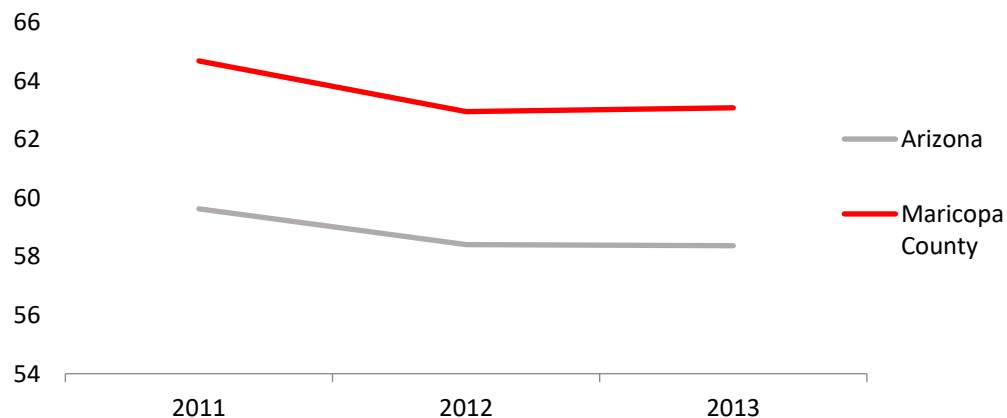


(Arizona Department of Health Services, 2017)

**Table: Overall Cancer Incidence Rate per 100,000, 2011-2013**

	2011	2012	2013
Arizona	403.9	393.6	385.5
Maricopa County	415.6	404.7	395.5

**The incidence rate for breast cancer is higher in Maricopa County than Arizona.**

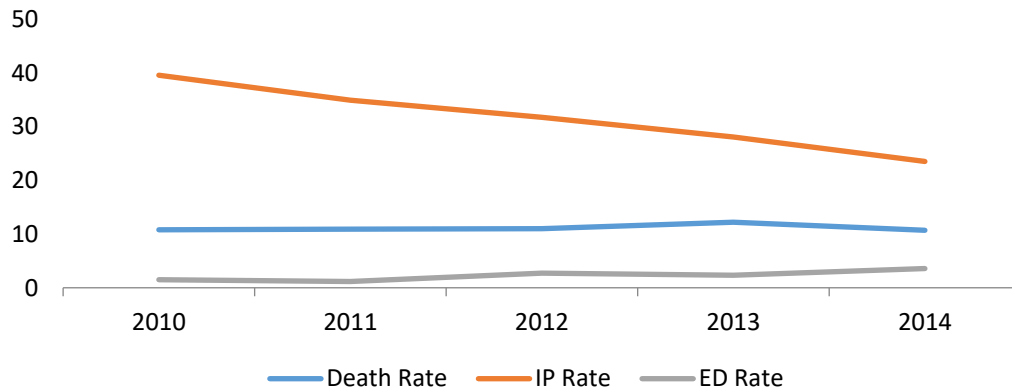


(Arizona Department of Health Services, 2017)

**Table: Incidence Rates per 100,000 for Breast Cancer, 2011-2013**

	2011	2012	2013
Arizona	59.6	58.4	58.4
Maricopa County	64.7	63.0	63.1

**The inpatient hospitalization rate due to breast cancer is higher than emergency department hospitalizations and death rates in Maricopa County.**

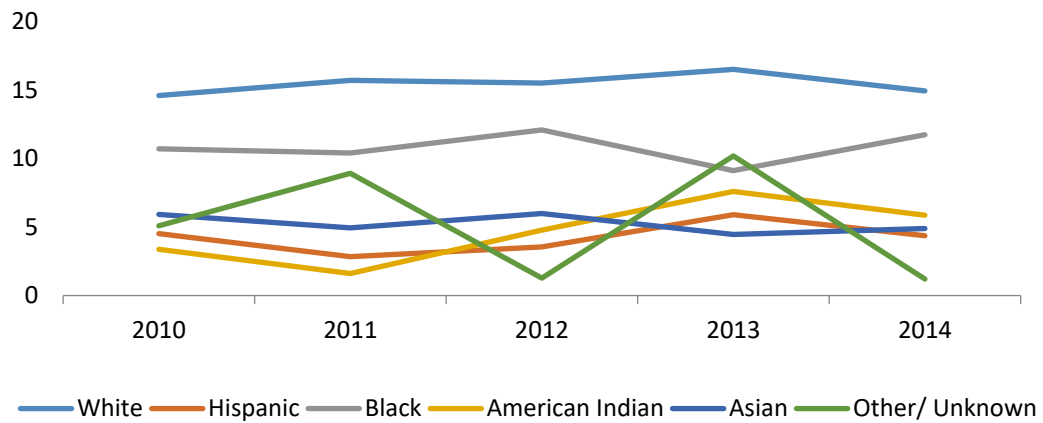


(Arizona Department of Health Services, n.d.)

**Table: Comparison of Hospitalization Rates per 100,000 (IP & ED) to Death Rates Due to Breast Cancer, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Death Rate	10.8	10.9	11.0	12.2	10.7
IP Rate	39.6	34.9	31.7	28.1	23.5
ED Rate	1.5	1.2	2.7	2.3	3.6

**The death rate due to breast cancer remains high among white and black females.**

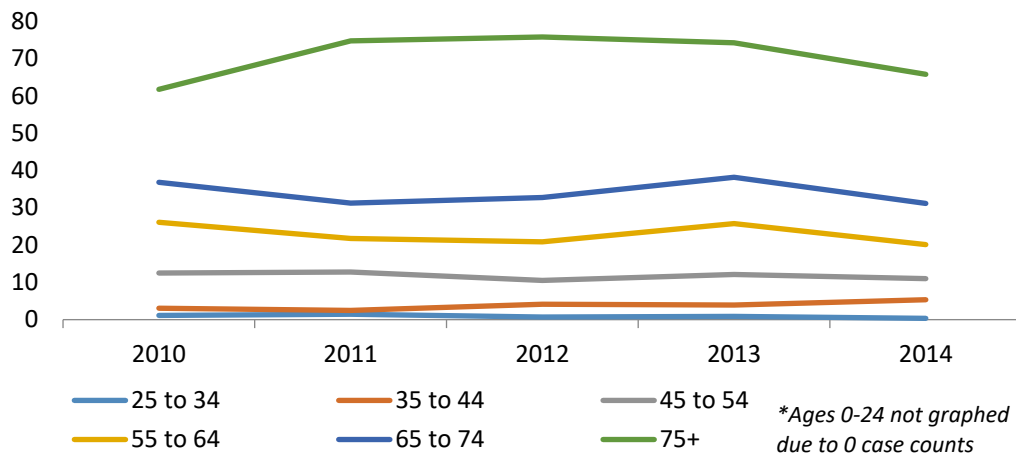


(Arizona Department of Health Services, n.d.)

**Tables: Death Rate per 100,000 Due to Breast Cancer by Race, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
White	14.6	15.7	15.5	16.5	14.9
Hispanic	4.5	2.8	3.6	5.9	4.4
Black	10.7	10.4	12.1	9.1	11.7
American Indian	3.4	1.6	4.8	7.6	5.9
Asian	5.9	4.9	6.0	4.5	4.9
Other/ Unknown	5.1	8.9	1.3	10.2	1.2

**The death rate due to breast cancer is prominent in the age group 75+.**

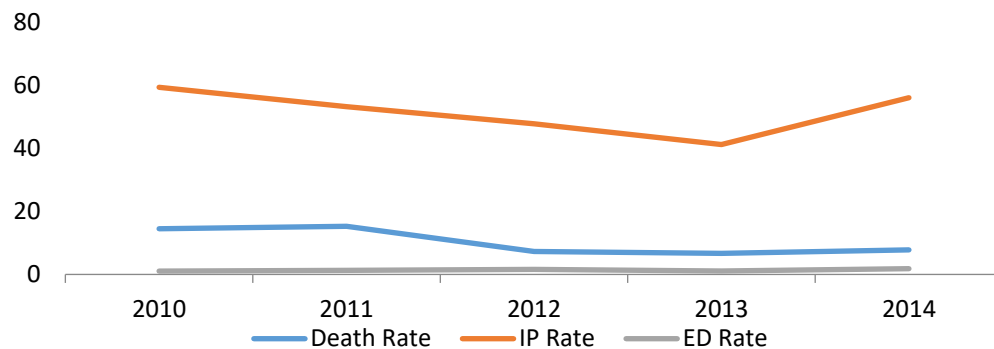


(Arizona Department of Health Services, n.d.)

**Table: Death Rate Due per 100,000 to Breast Cancer by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0 to 24	-	-	-	-	-
25 to 34	1.1	1.5	0.7	0.9	0.3
35 to 44	3.0	2.5	4.1	3.9	5.3
45 to 54	12.5	12.8	10.5	12.1	11.0
55 to 64	26.1	21.8	20.9	25.7	20.1
65 to 74	36.8	31.3	32.7	38.2	31.2
75+	61.8	74.8	75.8	74.2	65.8

**The inpatient hospitalization rate remains higher than the death and emergency department rates among those with prostate cancer in Maricopa County.**

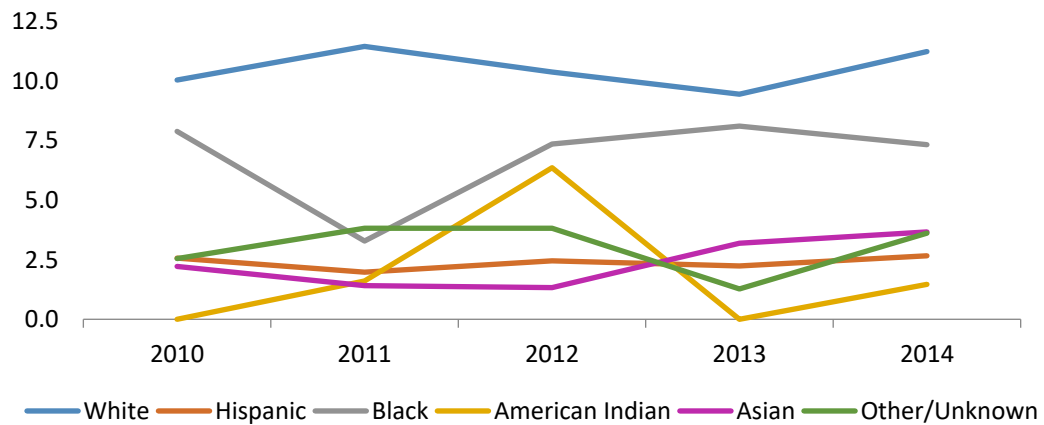


(Arizona Department of Health Services, n.d.)

**Table: Comparison of Hospitalization Rates per 100,000 (IP & ED) to Death Rates Due to Prostate Cancer, 2010-2014**

	2010	2011	2012	2013	2014
Death Rate	14.5	15.3	7.3	6.7	7.8
IP Rate	59.5	53.3	47.9	41.3	56.1
ED Rate	1.1	1.3	1.6	1.1	1.8

**The death rate due to prostate cancer is more prominent among white males in Maricopa County.**

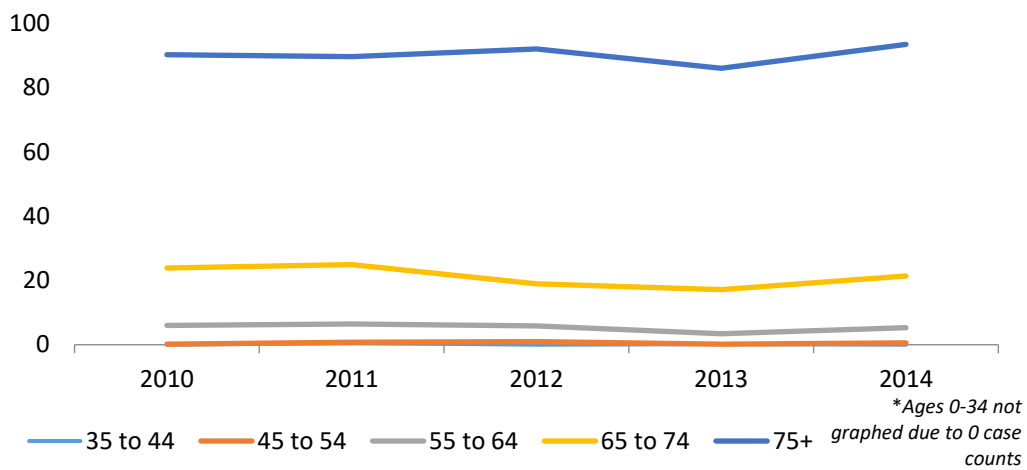


(Arizona Department of Health Services, n.d.)

**Table: Death Rate per 100,000 Due to Prostate Cancer by Race, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
White	10.0	11.5	10.4	9.5	11.2
Hispanic	2.6	2.0	2.5	2.2	2.7
Black	7.9	3.3	7.4	8.1	7.3
American Indian	0.0	1.6	6.4	0.0	1.5
Asian	2.2	1.4	1.3	3.2	3.7
Other/ Unknown	2.5	3.8	3.8	1.3	3.6

**The death rate due to prostate cancer is highest among males 75+ in Maricopa County.**

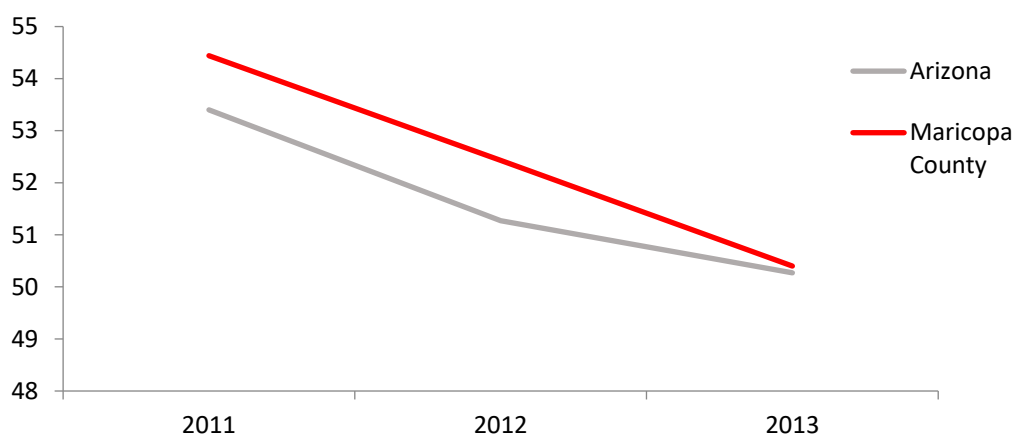


(Arizona Department of Health Services, n.d.)

**Table: Death Rate per 100,000 Due to Prostate Cancer by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0 to 34	-	-	-	-	-
35 to 44	0.0	0.6	0.0	0.2	0.0
45 to 54	0.2	0.8	1.0	0.2	0.6
55 to 64	6.0	6.5	5.9	3.4	5.3
65 to 74	31.3	23.9	24.9	19.0	17.2
75+	90.2	89.6	92.0	86.0	93.5

**The incidence rate for lung and bronchus cancer has declined in Maricopa County from 2011-2013.**

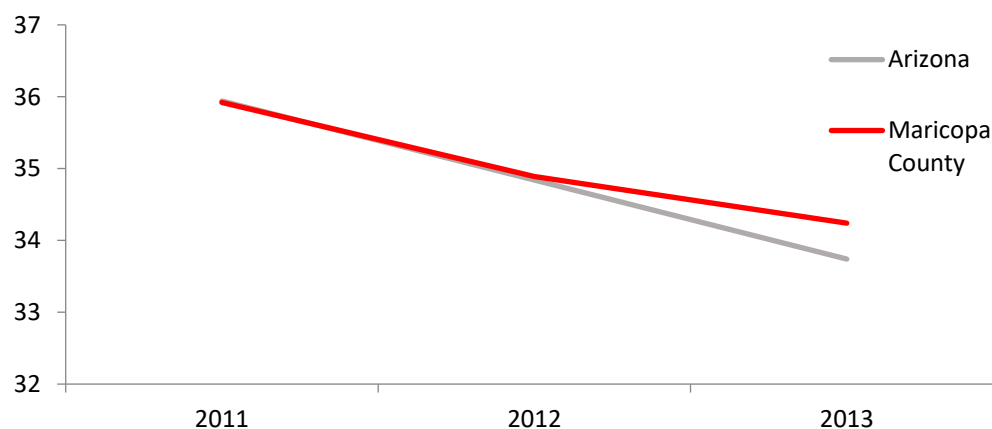


(Arizona Department of Health Services, 2017)

**Table: Incidence Rate per 100,000 for Lung and Bronchus Cancer, 2011-2013**

	2011	2012	2013
Arizona	53.4	51.3	50.3
Maricopa County	54.4	52.4	50.4

**The incidence rate for colorectal cancer has declined in Maricopa County from 2011-2013.**

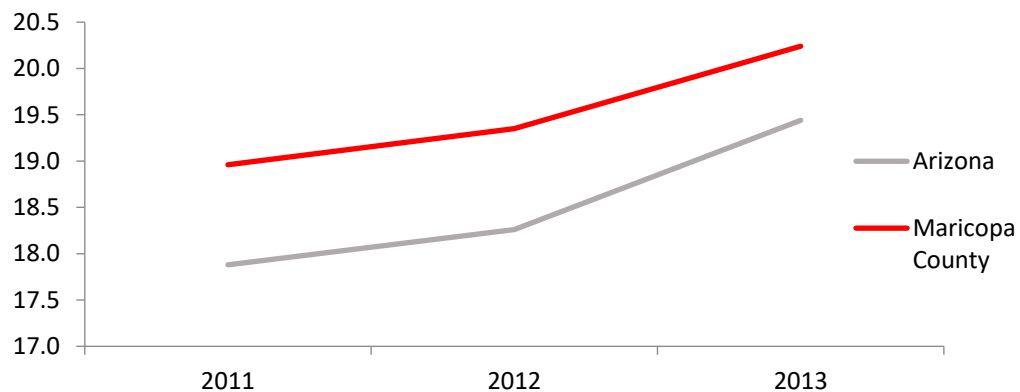


(Arizona Department of Health Services, 2017)

**Table: Incidence Rate per 100,000 for Colorectal Cancer, 2011-2013**

	2011	2012	2013
Arizona	35.9	34.8	33.7
Maricopa County	35.9	34.9	34.2

**The incidence rate for melanoma cancer has increased for Arizona and Maricopa County between 2011-2013.**



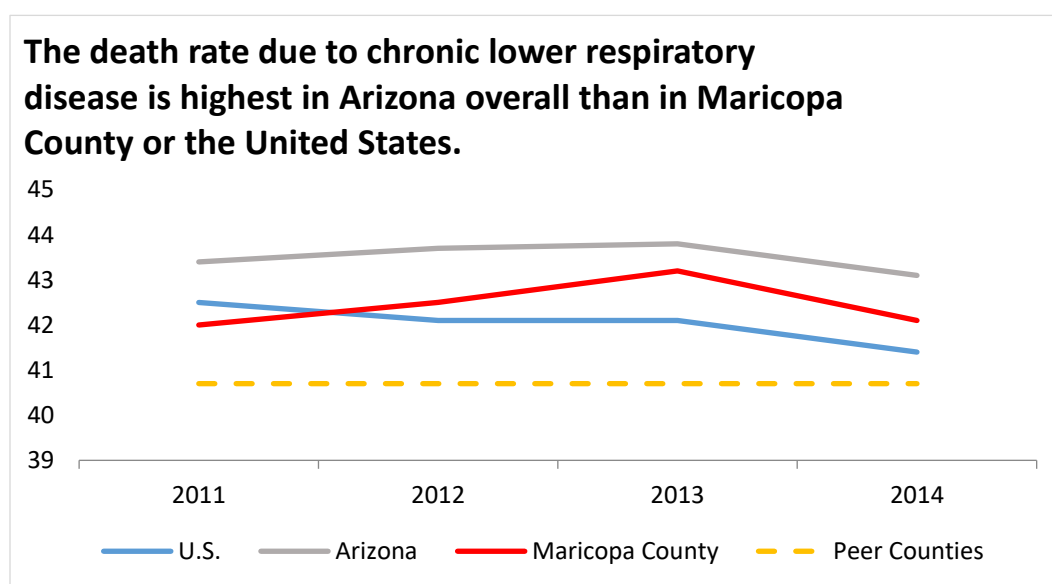
(Arizona Department of Health Services, 2017)

Table: Incidence Rate per 100,000 for Melanoma Cancer, 2011-2013			
	2011	2012	2013
Arizona	17.9	18.3	19.4
Maricopa County	19.0	19.4	20.2

## Chronic Lower Respiratory Disease

According to the National Vital Statistics Report from the Centers for Diseases Control and Prevention, the third top leading cause of death in the United States and in Maricopa County is chronic lower respiratory disease. In 2014, chronic lower respiratory diseases (including asthma) accounted for 147,101 deaths in the United States. (Herone, 2016)

The graph below (2011-2014) is a comparison of chronic lower respiratory related deaths at the national, state, and local level. The death rates for chronic lower respiratory disease death rates average higher in the state of Arizona than in comparison to national data. When comparing Maricopa County and the state of Arizona, chronic lower respiratory disease death rates are only slightly different, but with an overall decline in death rates for all.



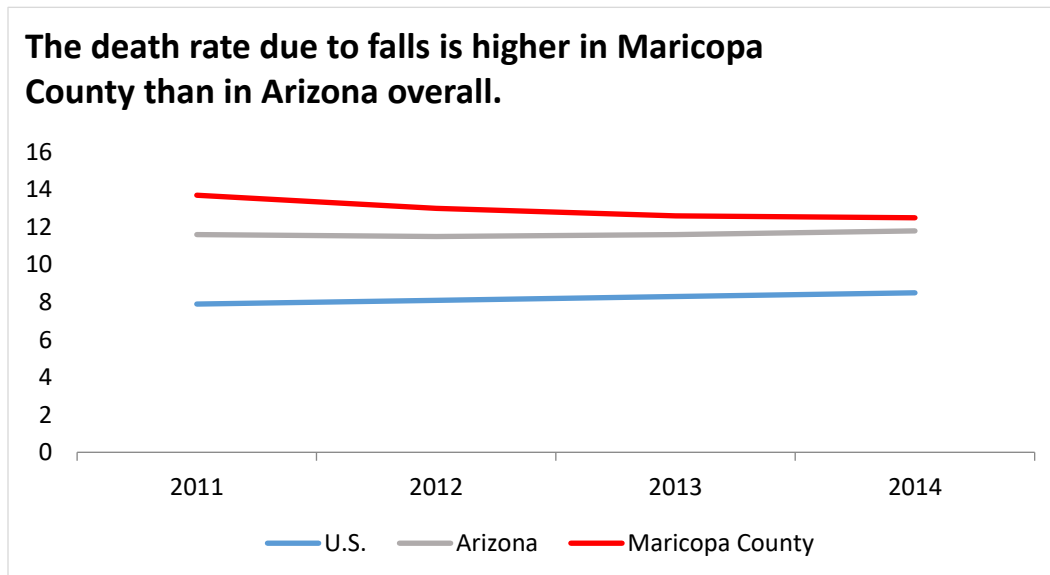
(Arizona Department of Health Services, n.d.)

Table: Death Rate per 100,000 Due to Chronic Lower Respiratory Disease, 2011-2014				
	2011	2012	2013	2014
United States	42.5	42.1	42.1	41.4
Arizona	43.4	43.7	43.8	43.1
Maricopa County	42.0	42.5	43.2	42.1
Peer Counties	40.7	40.7	40.7	40.7

## Accidents (Unintentional Injuries)

According to the National Vital Statistics Report from the Centers for Disease Control and Prevention, the fourth top leading cause of death in the United States is accidental deaths (unintentional injuries) and is ranked sixth in Maricopa County. In 2014, accidental deaths accounted for 136,053 lives in the United States. (Herone, 2016)

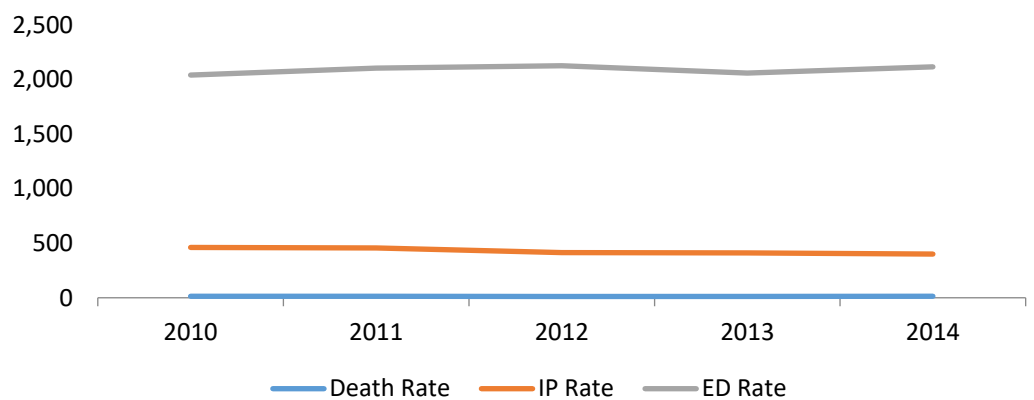
The graphs below are a comparison of accidental deaths at the national, state, and local level (between 2011 and 2014). When reviewing local data, Maricopa County had the highest rates of deaths due to falls in comparison to the state of Arizona and national data. In addition, deaths due to falls showed to be proportionally higher amongst Whites and those ages 75+ in comparison to other racial/ethnic and age groups in Maricopa County.



(Arizona Department of Health Services, n.d.)

Table: Death Rate per 100,000 Due to Falls, 2011-2014				
	2011	2012	2013	2014
U.S.	7.9	8.1	8.3	8.5
Arizona	11.6	11.5	11.6	11.8
Maricopa County	13.7	13.0	12.6	12.5

**The emergency department rates due to falls are much higher than the inpatient hospitalization and death rates.**

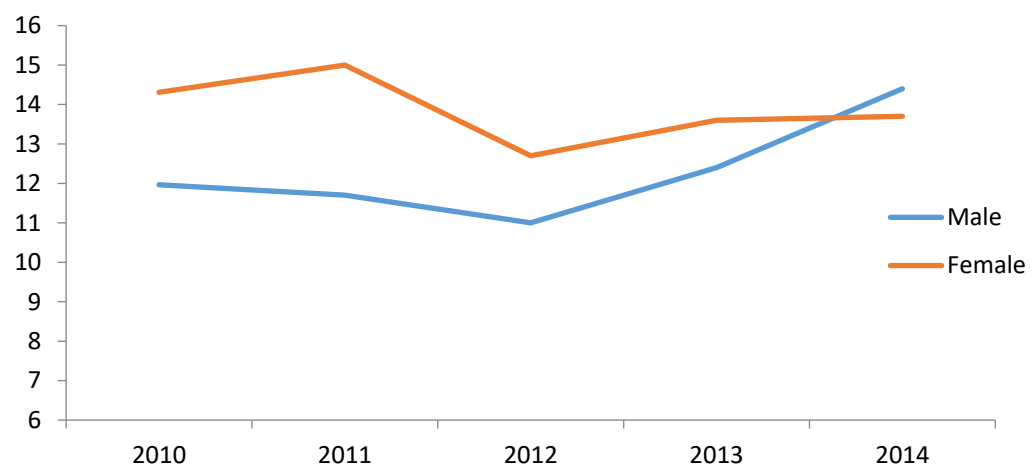


(Sagna, Gupta, & Torres, Arizona Department of Health Services, 2016), (Arizona Department of Health Services, n.d.)

**Table: Comparison of Hospitalization Rates per 100,000 (IP & ED) to Death Rates Due to Falls, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Death Rate	13.2	13.3	11.8	13.0	14.0
IP Rate	461.6	456.7	413.9	410.7	400.9
ED Rate	2,042.0	2,105.4	2,127.7	2,059.9	2,116.9

**Deaths due to falls in Maricopa County have been higher among females but are increasing in males.**

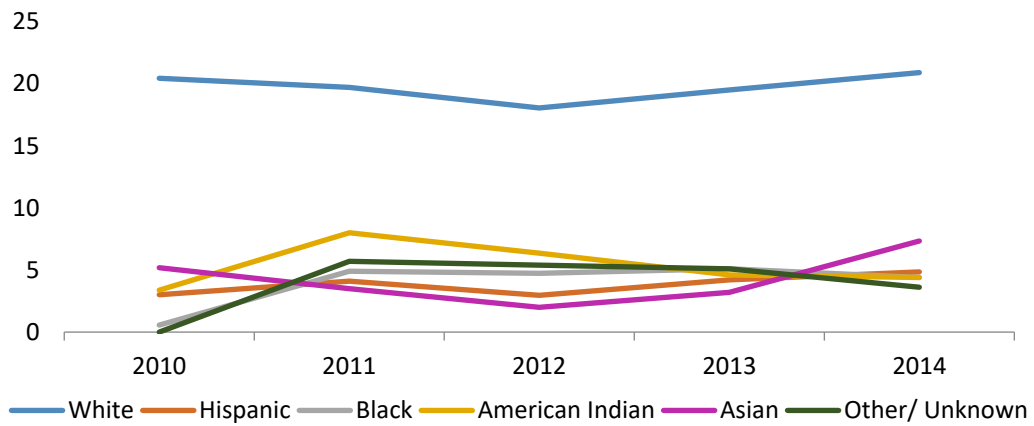


(Arizona Department of Health Services, n.d.)

**Table: Deaths per 100,000 Due to Falls by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	12.0	11.7	11.0	12.4	14.4
Female	14.3	15.0	12.7	13.6	13.7

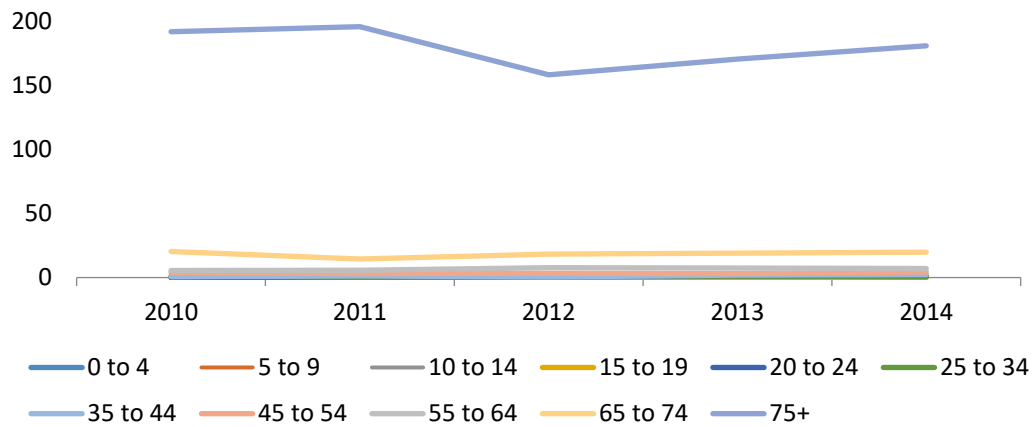
**The deaths due to falls in Maricopa County are highest among whites.**



(Arizona Department of Health Services, n.d.)

Table: Death Rate per 100,000 Due to Falls by Race, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
White	20.4	19.7	18.1	19.5	20.9
Hispanic	3.0	4.1	3.0	4.2	4.8
Black	0.6	4.9	4.7	5.1	4.4
American Indian	3.4	8.0	6.4	4.6	4.4
Asian	5.2	3.5	2.0	3.2	7.3
Other	0.0	5.7	5.4	5.1	3.6

**The death rate due to falls in Maricopa County is highest among those aged 75+.**



(Arizona Department of Health Services, n.d.)

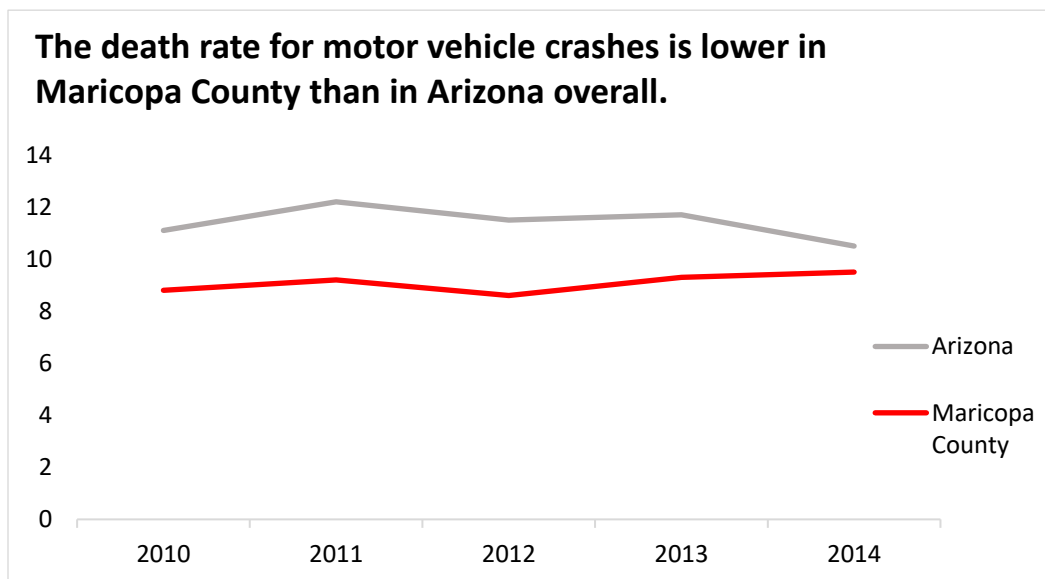
**Table: Death Rate per 100,000 due to Falls by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0 to 4	0.0	0.4	0.0	0.0	0.4
4 to 9	0.4	0.0	0.0	0.0	0.0
10 to 14	0.0	0.0	0.0	0.3	0.0
15 to 19	0.0	0.7	0.7	0.0	0.4
20 to 24	0.0	0.7	0.7	1.4	1.0
25 to 34	1.1	0.7	1.3	1.2	0.7
35 to 44	0.6	1.3	0.4	2.0	2.4
45 to 54	4.0	3.1	3.3	3.1	4.4
55 to 64	5.5	5.7	7.7	7.5	7.1
65 to 74	20.4	14.5	18.3	19.1	19.9
75+	192.0	196.0	158.4	170.7	181.0

## Motor Vehicle Crashes

The graphs below are a comparison of motor vehicle crashes at the national, state, and local level (between 2010 and 2014). According to the National Center for Health Statistics, in 2014 motor vehicle traffic deaths accounted for 33,736 lives in the United States. (Herone, 2016)

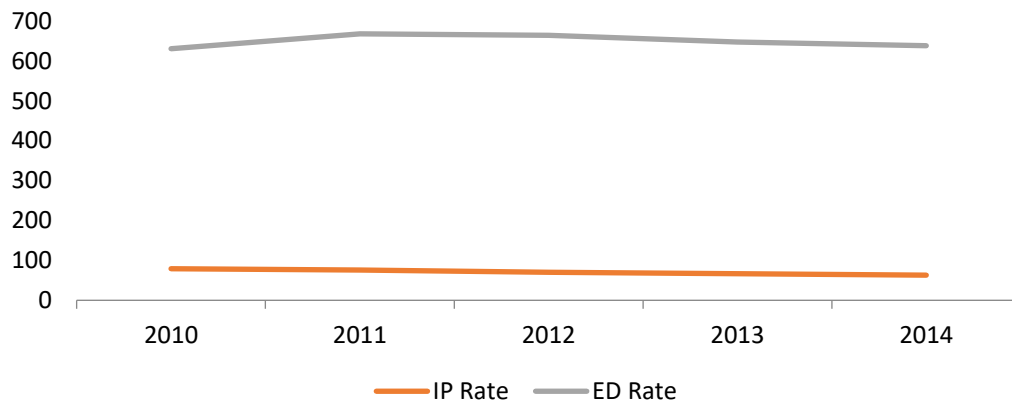
However, death rates in the State of Arizona were higher than comparison to Maricopa County. Upon review of local data, emergency department rates were significantly higher than death rates following hospitalization rates in Maricopa County. Death rates were also higher in the male group and American Indian population.



(Arizona Department of Health Services, n.d.)

Table: Death Rate per 100,000 Due to Motor Vehicle Crashes, 2011-2014					
	2010	2011	2012	2013	2014
Arizona	11.1	12.2	11.5	11.7	10.5
Maricopa County	8.8	9.2	8.6	9.3	9.5

**The emergency department rates in Maricopa County are higher than inpatient hospitalizations following a motor vehicle crash.**

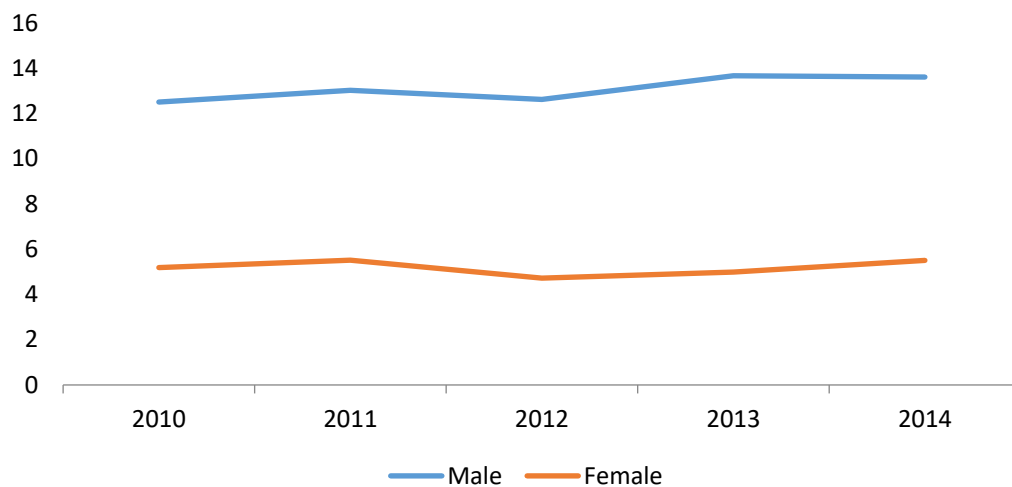


(Arizona Department of Health Services, n.d.)

**Table: Comparison of Hospitalization Rates & Emergency Department Rates (per 100,000) Due to Motor Vehicle Crashes, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
IP Rate	79.2	75.9	70.2	66.6	63.1
ED Rate	630.8	668.1	664.4	647.7	638.5

**The death rate due to motor vehicle crashes is significantly higher among males in Maricopa County.**

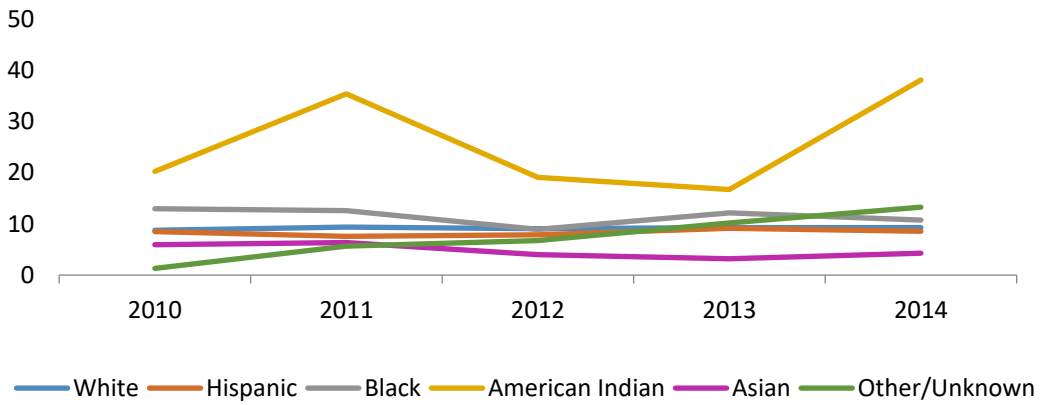


(Arizona Department of Health Services, n.d.)

**Table: Death Rate per 100,000 Due to Motor Vehicle Crashes by Gender, Maricopa County, 2010 -2014**

	2010	2011	2012	2013	2014
Male	12.5	13.0	12.6	13.7	13.6
Female	5.2	5.5	4.7	5.0	5.5

**Motor vehicle crash deaths are the highest among American Indians in Maricopa County.**

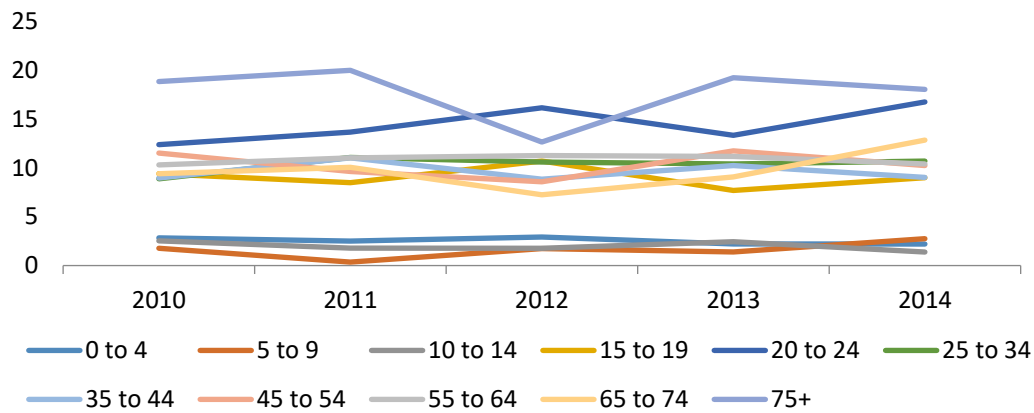


(Arizona Department of Health Services, n.d.)

**Table: Death Rate per 100,000 Due to Motor Vehicle Crash by Race, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
White	8.7	9.4	9.1	9.3	9.3
Hispanic	8.5	7.6	7.9	9.1	8.6
Black	13.0	12.6	8.9	12.2	10.8
American Indian	20.3	35.4	19.1	16.7	38.1
Asian	5.9	6.4	4.0	3.2	4.3
Other/ Unknown	1.3	5.7	6.7	10.2	13.3

**In Maricopa County, the motor vehicle crash death rates are highest among the 20-24 age group and those 75+.**

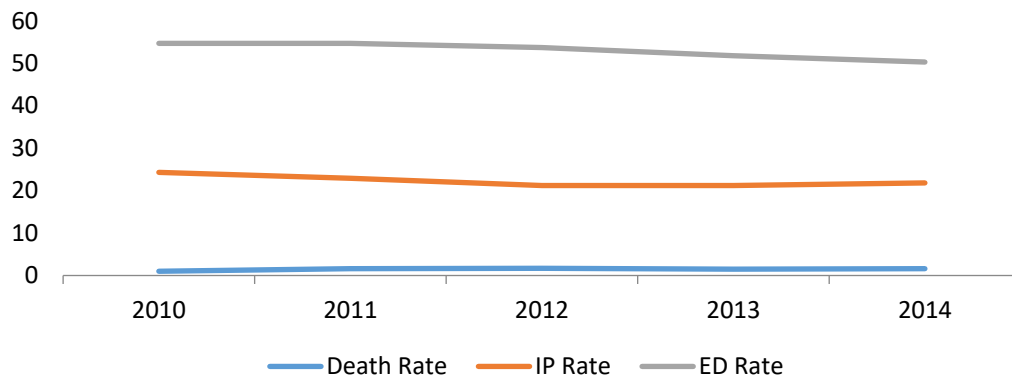


(Arizona Department of Health Services, n.d.)

**Table: Death Rate per 100,000 Due to Motor Vehicle Crashes by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0 to 4	2.8	2.5	2.9	2.2	2.2
4 to 9	1.8	0.4	1.7	1.4	2.8
10 to 14	2.5	1.8	1.8	2.4	1.4
15 to 19	9.4	8.5	10.7	7.7	9.0
20 to 24	12.4	13.6	16.1	13.3	16.7
25 to 34	8.9	11.1	10.6	10.4	10.7
35 to 44	9.0	11.0	8.8	10.2	9.0
45 to 54	11.5	9.6	8.6	11.7	10.2
55 to 64	10.3	11.0	11.3	11.2	10.4
65 to 74	9.4	10.0	7.2	9.1	12.8
75+	18.8	20.0	12.6	19.2	18.0

**The emergency department rates are significantly higher than inpatient hospitalization and death rates in Maricopa County.**

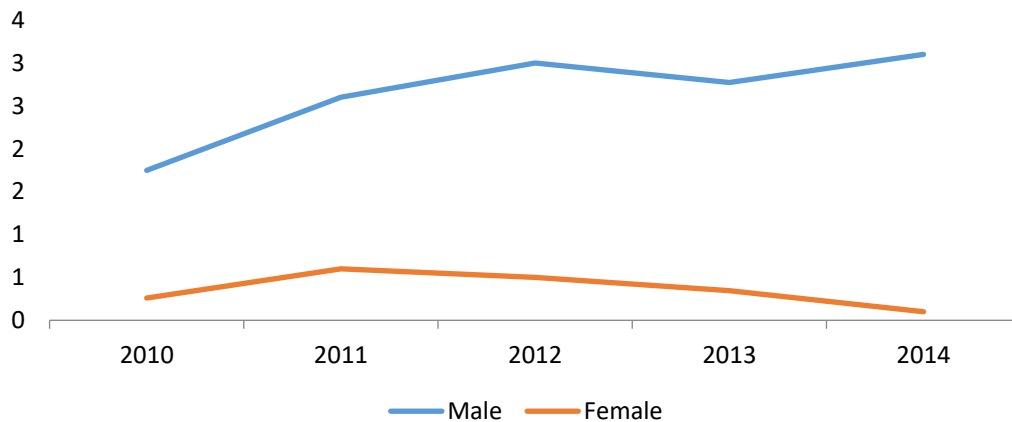


(Arizona Department of Health Services, n.d.)

**Table: Comparison of Hospitalization Rates (IP & ED) to Death Rates (per 100,000) Due to Motorcycle Crashes, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Death Rate	1.0	1.6	1.7	1.5	1.6
IP Rate	24.3	22.9	21.2	21.2	21.8
ED Rate	54.7	54.7	53.7	51.8	50.3

**Males in Maricopa County have a significantly higher death rate due to a motorcycle crashes than females.**

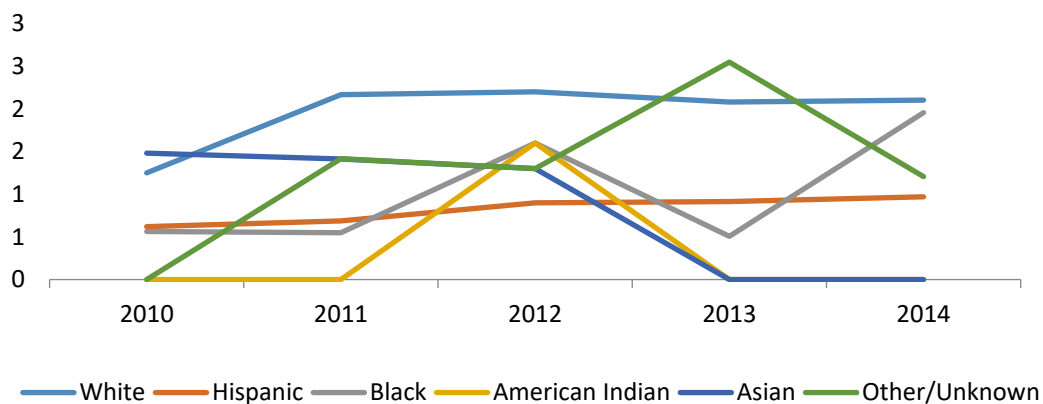


(Arizona Department of Health Services, n.d.)

**Table: Death Rate per 100,000 Due to Motorcycle Crashes by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	1.7	2.6	3.0	2.8	3.1
Female	0.3	0.6	0.5	0.3	0.1

**In Maricopa County, the death rate due to motorcycle crashes fluctuates each year in all races.**

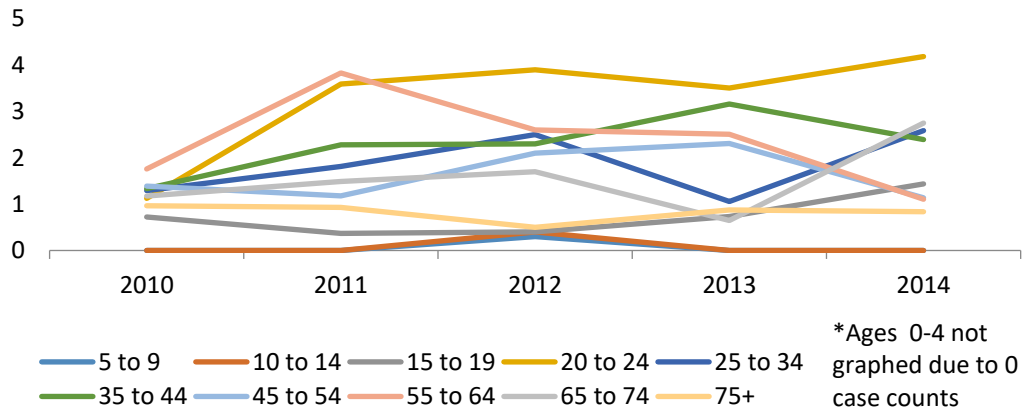


(Arizona Department of Health Services, n.d.)

**Table: Death Rate per 100,000 Due to Motorcycle Crashes by Race, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
White	1.2	2.2	2.2	2.1	2.1
Hispanic	0.6	0.7	0.9	0.9	1.0
Black	0.6	0.5	1.6	0.5	2.0
American Indian	0.0	0.0	1.6	0.0	0.0
Asian	1.5	1.4	1.3	0.0	0.0
Other/ Unknown	0.0	1.4	1.3	2.5	1.2

**In Maricopa County, the death rate due to motorcycle crashes is usually highest among 20-24 year olds.**



(Arizona Department of Health Services, n.d.)

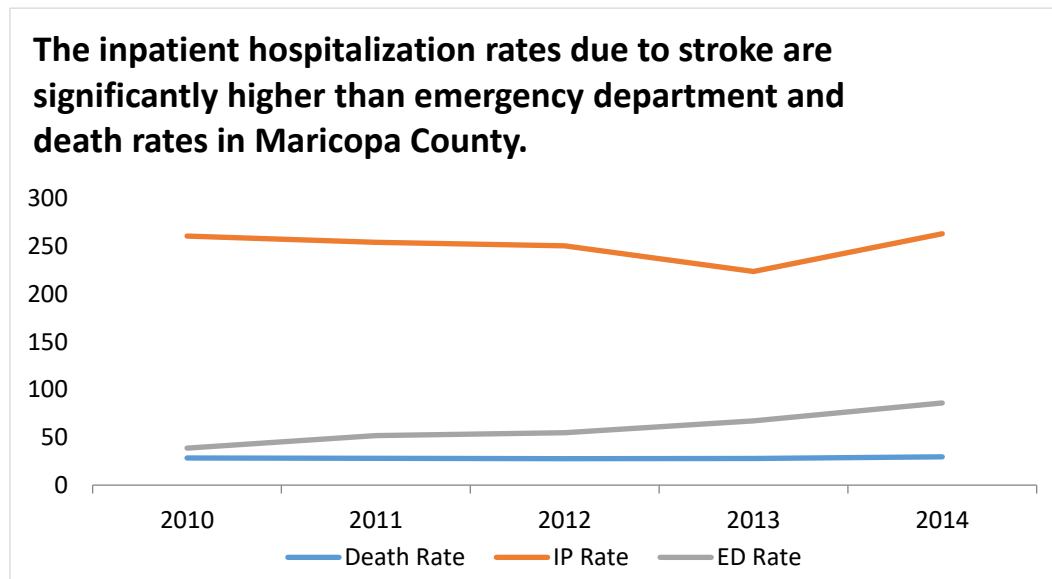
**Table: Death Rate per 100,000 Due to Motorcycle Crashes by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0 to 4	0.0	0.0	0.0	0.0	0.0
4 to 9	0.0	0.0	0.3	0.0	0.0
10 to 14	0.0	0.0	0.4	0.0	0.0
15 to 19	0.7	0.4	0.4	0.7	1.4
20 to 24	1.1	3.6	3.9	3.5	4.2
25 to 34	1.3	1.8	2.5	1.1	2.6
35 to 44	1.3	2.3	2.3	3.2	2.4
45 to 54	1.4	1.2	2.1	2.3	1.1
55 to 64	1.8	3.8	2.6	2.5	1.1
65 to 74	1.2	1.5	1.7	0.6	2.7
75+	1.0	0.9	0.5	0.9	0.8

## Stroke

According to the National Vital Statistics Report from the Centers for Disease Control and Prevention, the fifth leading cause of death in the United States and Maricopa County are strokes (cerebrovascular diseases). In 2014, stroke deaths accounted for 133,103 lives in the United States. (Herone, 2016)

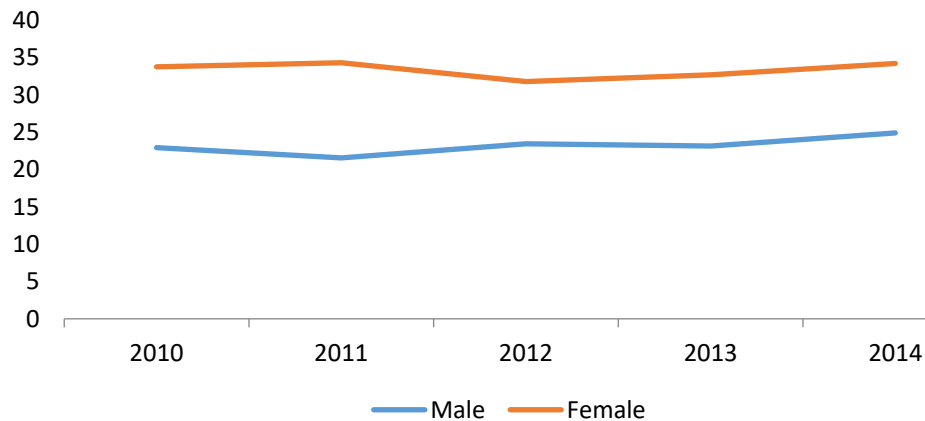
The graphs below are a comparison of accidental deaths at the national, state, and local level (2011-2014). When comparing stroke deaths by gender in Maricopa County, women have a proportionally higher rate than men. In addition, stroke deaths were higher amongst Whites and those ages 75+ in comparison to other racial/ethnic and age groups in Maricopa County.



(Arizona Department of Health Services, n.d.)

Table: Comparison of Hospitalization Rates (IP & ED) to Death Rates (per 100,000) Due to Stroke, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
Death Rate	28.4	28.0	27.6	28.0	29.6
IP Rate	260.6	254.0	250.5	223.6	263.1
ED Rate	38.7	51.9	54.8	67.2	86.0

**The death rate due to stroke is higher among females than males in Maricopa County.**

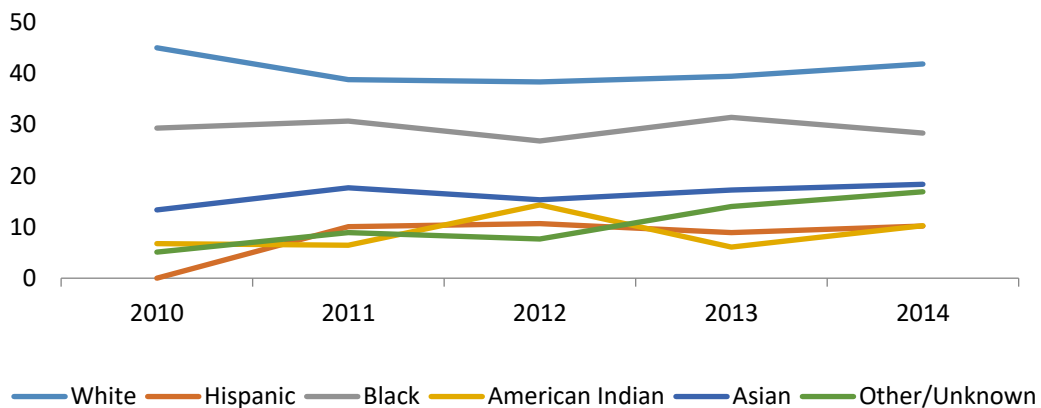


(Arizona Department of Health Services, n.d.)

**Table: Death Rate (per 100,000) Due to Stroke by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	22.9	21.6	23.4	23.1	24.9
Female	33.8	34.3	31.8	32.7	34.2

**In Maricopa County, the death rate due to stroke is higher in the white race compared to other races.**

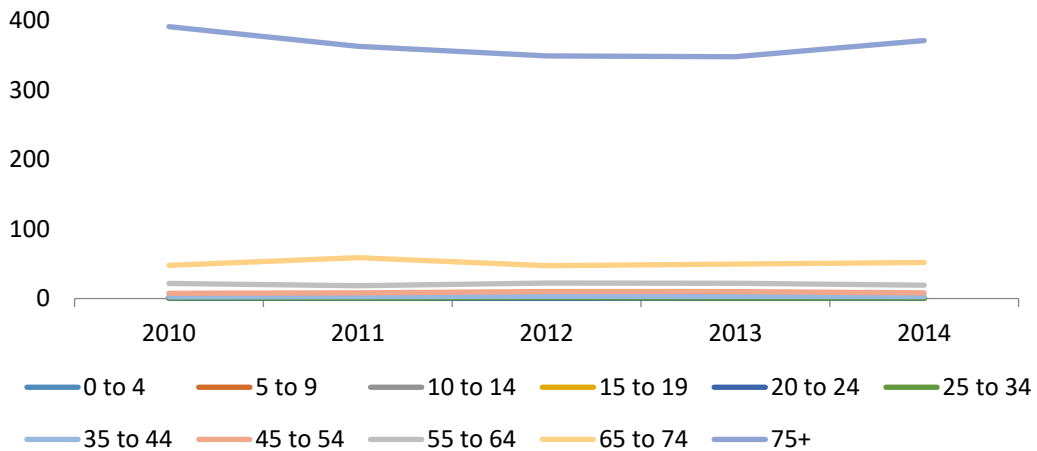


(Arizona Department of Health Services, n.d.)

**Table: Death Rate (per 100,000) Due to Stroke by Race, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
White	45.0	38.8	38.3	39.4	41.8
Hispanic	0.0	10.1	10.7	8.9	10.2
Black	29.3	30.7	26.8	31.4	28.4
American Indian	6.8	6.4	14.3	6.1	10.3
Asian	13.3	17.7	15.3	17.2	18.3
Other	5.1	8.9	7.6	14.0	16.9

**The death rate due to stroke is highest among the 75+ year olds in Maricopa County.**



(Arizona Department of Health Services, n.d.)

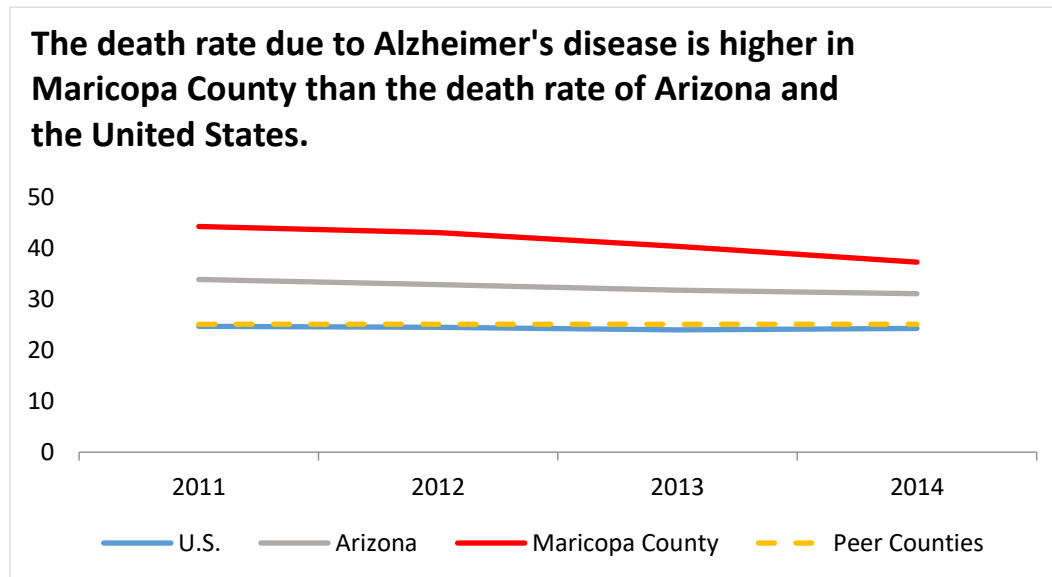
**Table: Death Rate (per 100,000) Due to Stroke by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0 to 4	1.1	2.2	0.7	0.7	0.7
5 to 9	1.1	0.4	0.7	0.0	0.0
10 to 14	0.4	0.4	0.7	0.0	0.3
15 to 19	0.4	0.0	0.7	0.0	0.0
20 to 24	0.4	0.0	0.7	0.0	0.3
25 to 34	0.9	0.9	1.4	0.9	0.9
35 to 44	2.5	2.8	3.0	3.2	2.9
45 to 54	7.5	8.3	10.1	10.0	8.1
55 to 64	21.8	18.4	22.3	21.9	19.2
65 to 74	47.8	58.8	47.2	49.5	51.9
75+	390.8	362.7	348.8	347.6	370.9

## Alzheimer's Disease

According to the National Vital Statistics Report from the Centers for Disease Control and Prevention, Alzheimer's disease is the sixth leading cause of death in the United States and the fourth leading cause of death in Maricopa County. In 2014, Alzheimer's disease was responsible for 93,541 deaths in the United States.

The graphs below are a comparison of deaths due to Alzheimer's disease at the national, state, and local level (2011-2014). When comparing national, state, and local data, the county has nearly twice as many Alzheimer's disease deaths in comparison to national rates.



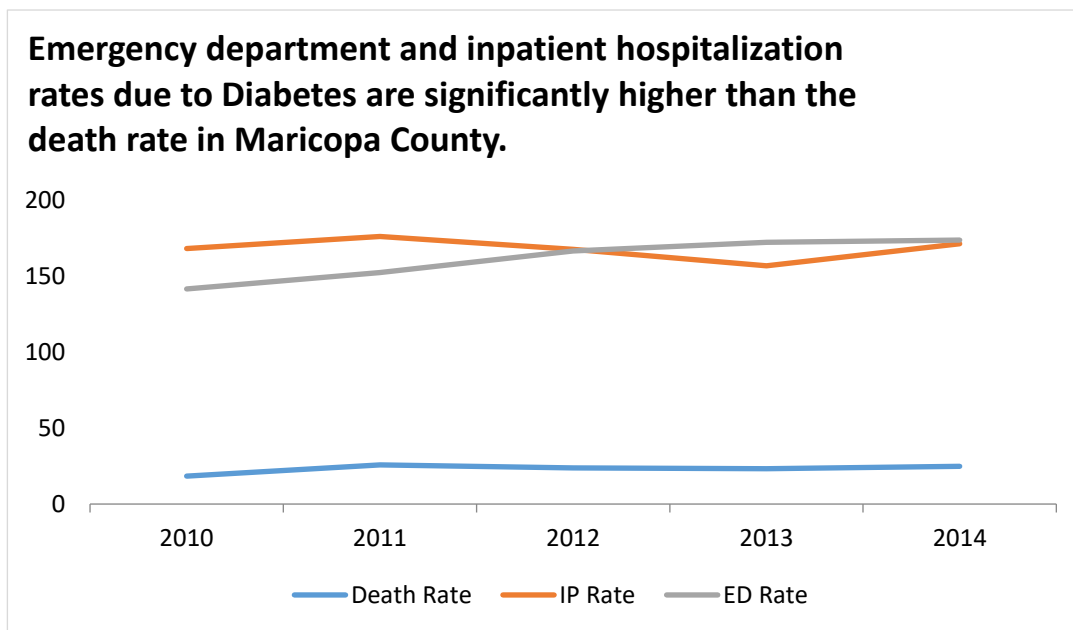
(Arizona Department of Health Services, n.d.)

Table: Death Rate (per 100,000) Due to Alzheimer's Disease, 2011-2014				
	2011	2012	2013	2014
United States	24.7	24.5	24.0	24.3
Arizona	33.9	32.9	31.8	31.1
Maricopa County	44.3	43.1	40.4	37.3
Peer Counties	25.1	25.1	25.1	25.1

## Diabetes

According to the National Vital Statistics Report from the Centers for Disease Control and Prevention, the seventh top leading cause of death in the United States is diabetes and it is the seventh leading cause of death in Maricopa County. In 2014, diabetes accounted for 76,488 lives in the United States. (Herone, 2016)

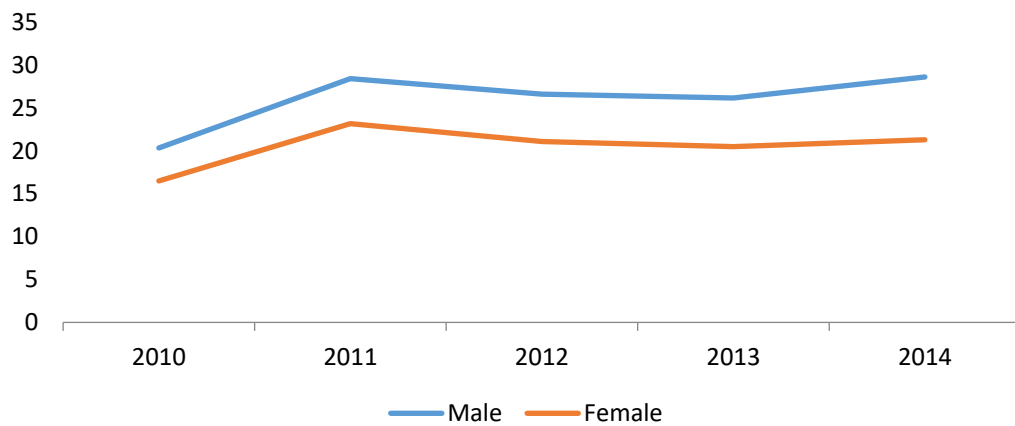
The graphs below are a comparison of diabetes deaths within Maricopa County (between 2011 and 2014). When reviewing the data, hospitalization and emergency department visit rates for diabetes far exceeded death rates. At the national level, there were a reported 37.3 million ambulatory care visits. Death rates were higher amongst men, in the American Indian population, and 75+ age group.



(Sagna, Gupta, & Torres, Hospital Inpatient Discharges & Emergency Room Visits Statistics - For Diabetes, 2016). (Arizona Department of Health Services, n.d.)

Table: Comparison of Hospitalization Rates (IP & ED) to Death Rates (per 100,000) Due to Diabetes, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
Death Rate	18.4	25.8	23.8	23.3	24.9
IP Rate	168.2	176.2	167.7	156.9	171.4
ED Rate	141.7	152.4	166.7	172.4	173.8

**The death rate due to Diabetes is consistently higher among males than females in Maricopa County.**

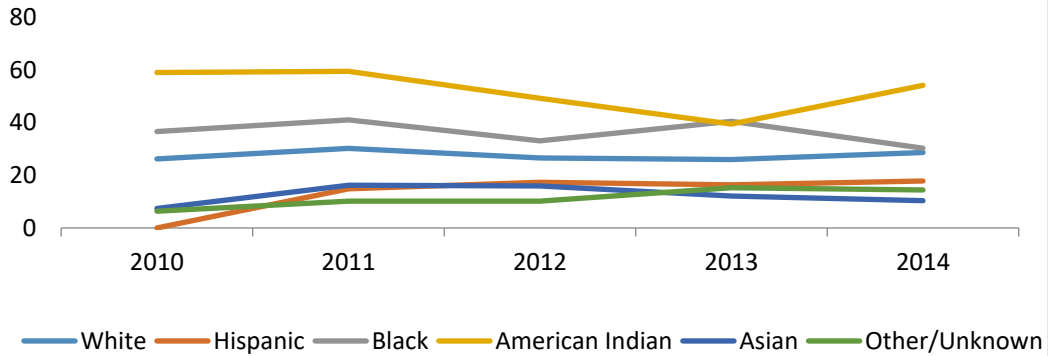


(Arizona Department of Health Services, n.d.)

**Table: Death Rate (per 100,000) Due to Diabetes by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	20.3	28.4	26.6	26.2	28.6
Female	16.5	23.2	21.1	20.5	21.3

**In Maricopa County, the death rate due to Diabetes is highest amongst the American Indians compared to all other races.**

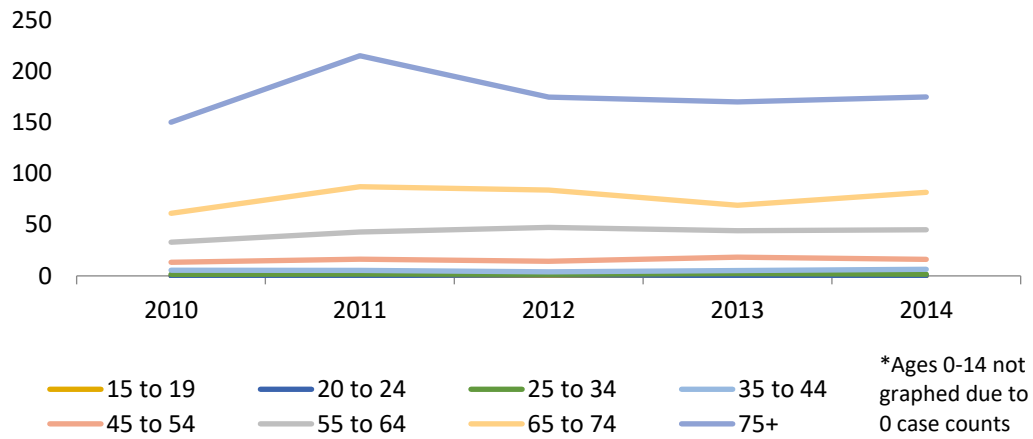


(Arizona Department of Health Services, n.d.)

**Table: Death Rate (per 100,000) Due to Diabetes by Race ,  
Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
White	26.3	30.3	26.6	26.0	28.7
Hispanic	0.0	14.9	17.3	16.4	17.9
Black	36.6	41.1	33.1	40.5	30.3
American Indian	59.1	59.5	49.3	39.5	54.2
Asian	7.4	16.2	16.0	12.1	10.4
Other	6.4	10.2	10.2	15.3	14.5

**The death rate due to Diabetes is highest among the age group 75+ in Maricopa County.**

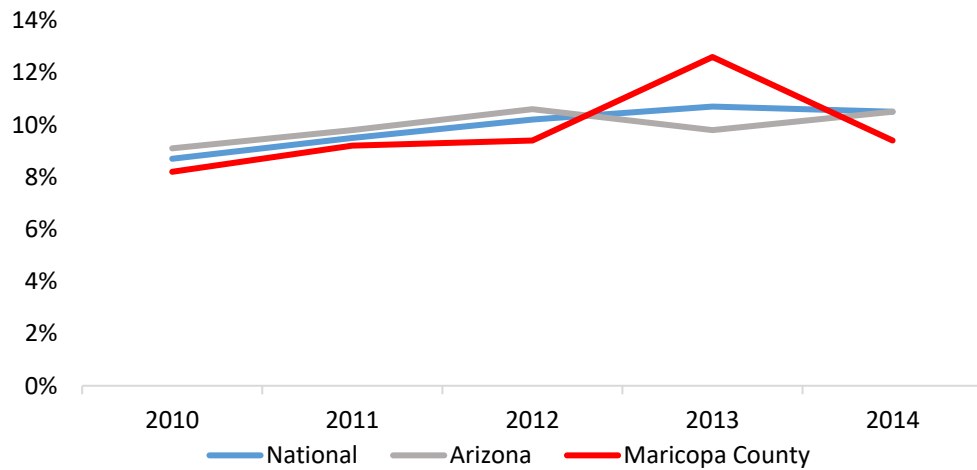


(Arizona Department of Health Services, n.d.)

**Table: Death Rate per 100,000 Due to Diabetes by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0 to 14	0.0	0.0	0.0	0.0	0.0
15 to 19	0.0	0.7	0.4	0.4	0.0
20 to 24	0.0	0.4	1.1	0.4	0.3
25 to 34	1.5	1.8	1.6	2.3	1.6
35 to 44	5.5	5.3	4.0	5.2	6.4
45 to 54	13.3	16.3	14.2	18.3	16.1
55 to 64	32.9	42.9	47.4	44.2	45.1
65 to 74	61.1	87.1	83.8	68.9	81.6
75+	150.1	215.0	174.6	169.9	174.8

**The percentage of adults in Maricopa County who have been told they have Diabetes rose in 2013 but otherwise remains consistent around 9.0%.**



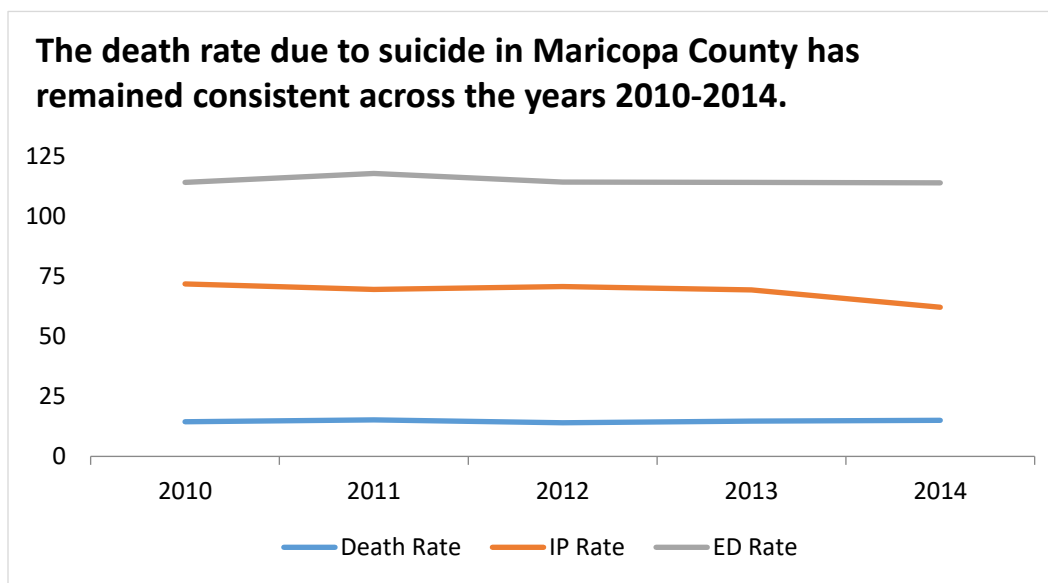
(Bass, Blackwell, & Hussaini, 2011 Arizona Behavioral Risk Factor Surveillance Survey, 2011), (Blackwell, Bass, Bishop, & Hussaini, 2012), (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014), (Bass & Porter, BRFSS, 2010 Health Status and Health Risk Behaviors of Arizonans, 2011)

Table: Percentage of Adults who have been told they have Diabetes, 2011-2012					
	2010	2011	2012	2013	2014
National	8.7%	9.5%	10.2%	10.7%	10.5%
Arizona	9.1%	9.8%	10.6%	9.8%	10.5%
Maricopa County	8.2%	9.2%	9.4%	12.6%	9.4%

## Intentional Self-Harm

According to the National Vital Statistics Report from the Centers for Disease Control and Prevention, the tenth top leading cause of death in the United States is intentional self-harm, also known as suicide. In Maricopa County suicide is ranked the eighth leading cause of death. In 2014, all suicide deaths accounted for 42,773 lives in the United States. (Herone, 2016)

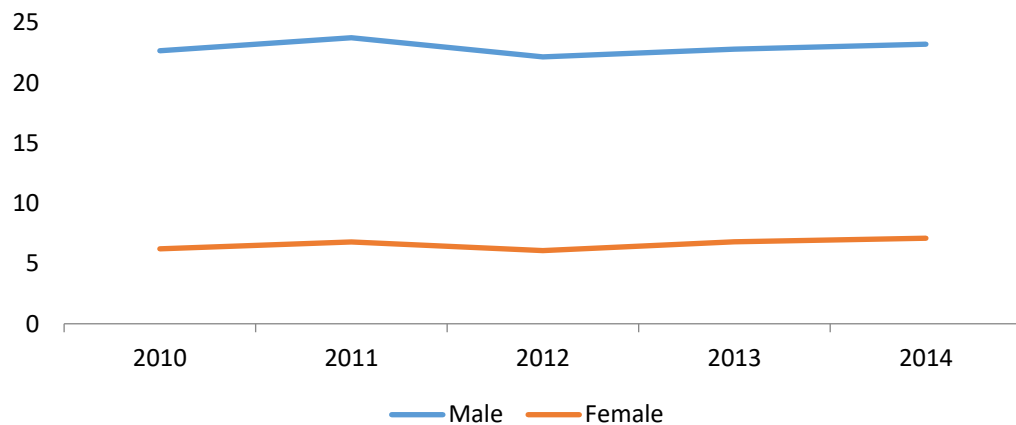
The graphs below are a comparison of suicide deaths within Maricopa County (between 2010 and 2014).



(Arizona Department of Health Services, n.d.)

Table: Comparison of Hospitalization Rates (IP & ED) to Death Rates per 100,000 Due to Suicide, 2010-2014					
	2010	2011	2012	2013	2014
Death Rate	14.4	15.2	14.0	14.7	15.0
IP Rate	71.8	69.5	70.7	69.3	62.1
ED Rate	114.1	117.8	114.2	114.1	113.9

## The death rate due to suicide is higher among males than females in Maricopa County.

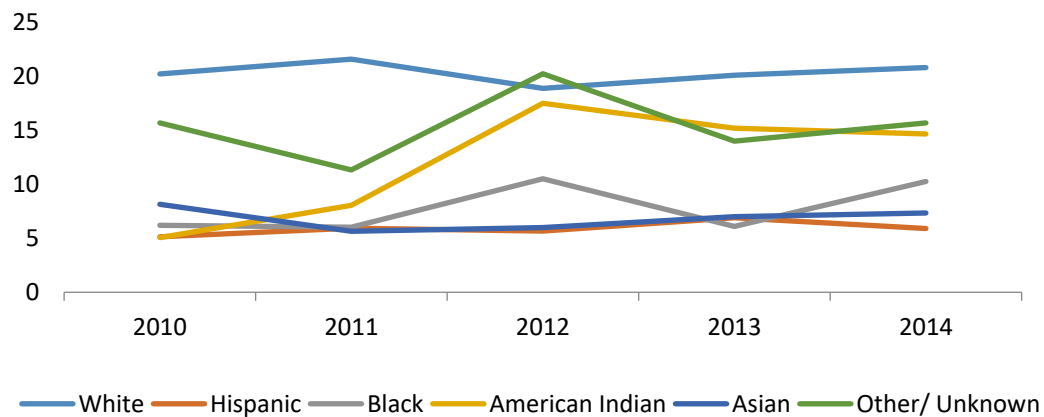


(Arizona Department of Health Services, n.d.)

Table: Death Rate per 100,000 Due to Suicide by Gender, 2010-2014

	2010	2011	2012	2013	2014
Male	22.7	23.7	22.2	22.8	23.2
Female	6.2	6.8	6.1	6.8	7.1

## The death rate due to suicide is overall most common among the white race in Maricopa County.

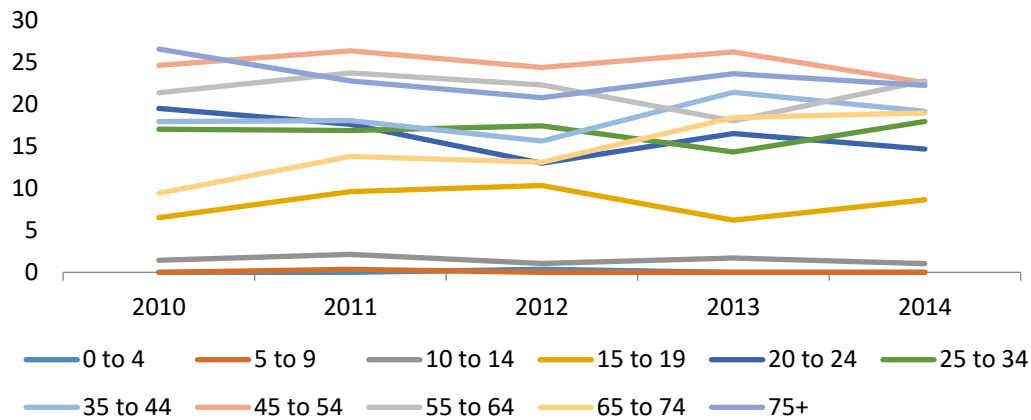


(Arizona Department of Health Services, n.d.)

Table: Death Rate per 100,000 Due to Suicide by Race, Maricopa County, 2010-2014

	2010	2011	2012	2013	2014
White	20.2	21.6	18.9	20.1	20.8
Hispanic	5.1	5.9	5.7	6.9	5.9
Black	6.2	6.0	10.5	6.1	10.3
American Indian	5.1	8.0	17.5	15.2	14.7
Asian	8.1	5.6	6.0	7.0	7.3
Other/ Unknown	15.7	11.3	20.2	14.0	15.7

**The death rate due to suicide in Maricopa County is most common among the age group 45 to 54 closely followed by those 75+.**



(Arizona Department of Health Services, n.d.)

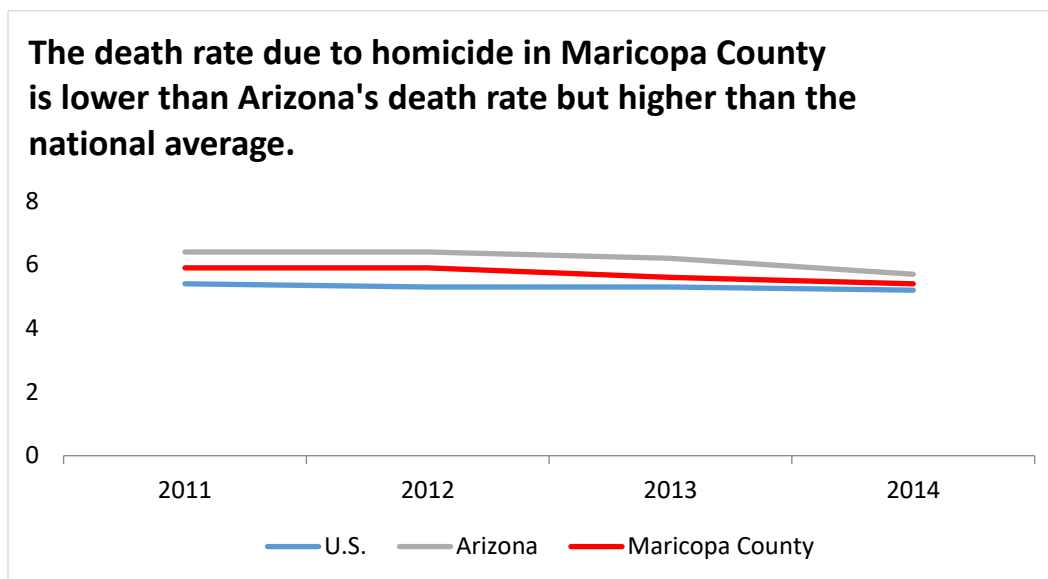
**Table: Death Rate per 100,000 Due to Suicide by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0 to 4	0.0	0.0	0.4	0.0	0.0
5 to 9	0.0	0.4	0.0	0.0	0.0
10 to 14	1.4	2.1	1.1	1.7	1.0
15 to 19	6.5	9.6	10.3	6.2	8.6
20 to 24	19.5	17.6	13.0	16.5	14.6
25 to 34	17.0	16.9	17.4	14.3	17.9
35 to 44	17.9	18.0	15.6	21.4	19.1
45 to 54	24.6	26.3	24.3	26.2	22.6
55 to 64	21.3	23.7	22.3	18.0	22.8
65 to 74	9.4	13.8	13.1	18.4	18.9
75+	26.5	22.8	20.8	23.6	22.2

## Homicide

According to the National Vital Statistics Report from the Centers for Disease Control and Prevention, in 2014, homicide was the fifteenth leading cause of death in the United States and the eight leading cause of death among African Americans in Maricopa County. (Herone, 2016)

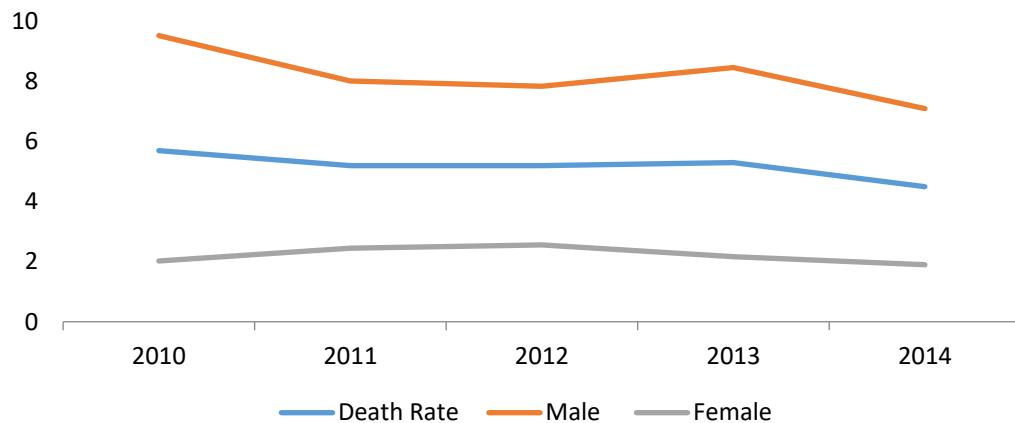
The graphs below (2011-2014) are a comparison of deaths due to homicide at the national, state, and local level. The state of Arizona shows to have higher homicide rates than those in Maricopa County. Homicide rates in Maricopa County were highest among African American males between the ages of 20-34.



(Arizona Department of Health Services, n.d.), (Centers for Disease Control and Prevention, 2017)

Table: Death Rate per 100,000 Due to Homicide, 2011-2014				
	2011	2012	2013	2014
U.S.	5.4	5.3	5.3	5.2
Arizona	6.4	6.4	6.2	5.7
Maricopa County	5.9	5.9	5.6	5.4

**The death rate due to homicide in Maricopa County is significantly higher among males than females.**

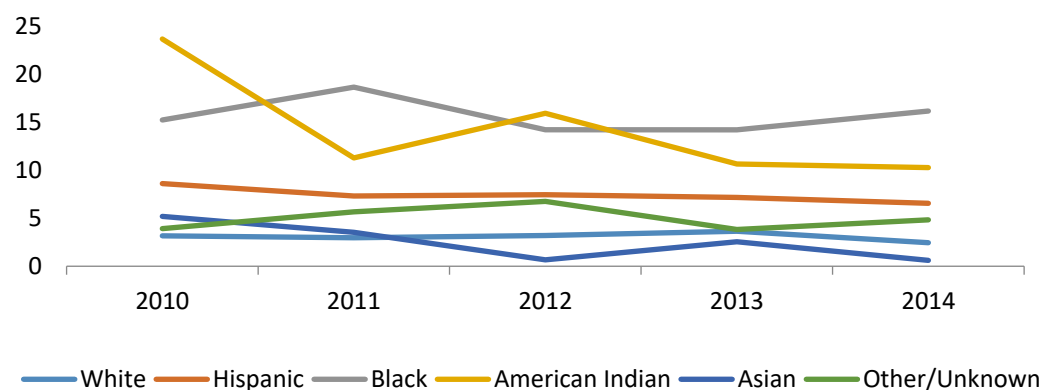


(Arizona Department of Health Services, n.d.)

**Table: Comparison of Death Rates per 100,000 Due to Homicide by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Total	5.7	5.2	5.2	5.3	4.5
Male	9.5	8.0	7.9	8.5	7.1
Female	2.0	2.5	2.6	2.2	1.9

**The death rates due to homicide in Maricopa County are highest among the Black and American Indian populations.**

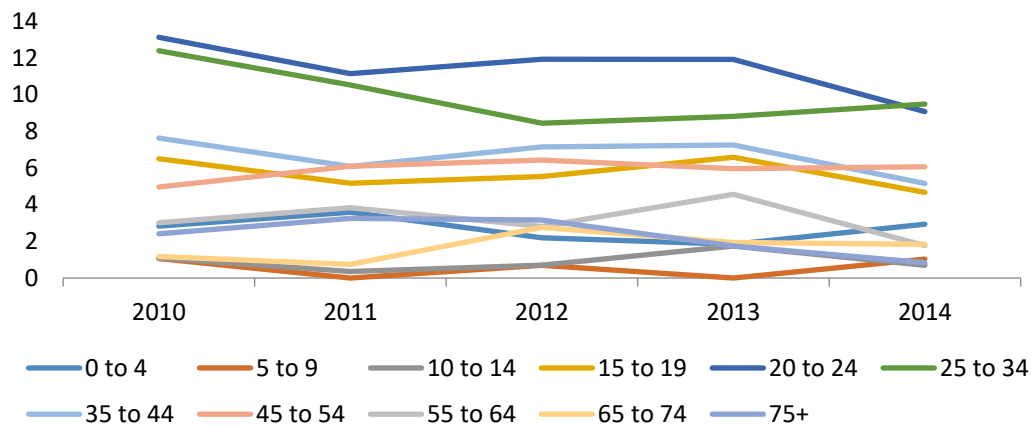


(Arizona Department of Health Services, n.d.)

Table: Death Rate per 100,000 Due to Homicide by Race,  
Maricopa County, 2010-2014

	2010	2011	2012	2013	2014
White	3.2	3.0	3.2	3.6	2.4
Hispanic	8.6	7.3	7.5	7.2	6.5
Black	15.2	18.6	14.2	14.2	16.1
American Indian	23.6	11.2	15.9	10.6	10.3
Asian	5.2	3.5	0.7	2.6	0.6
Other/ Unknown	3.9	5.7	6.7	3.8	4.8

**The death rates due to homicide in Maricopa County is highest among the 20-34 year olds.**



(Arizona Department of Health Services, n.d.)

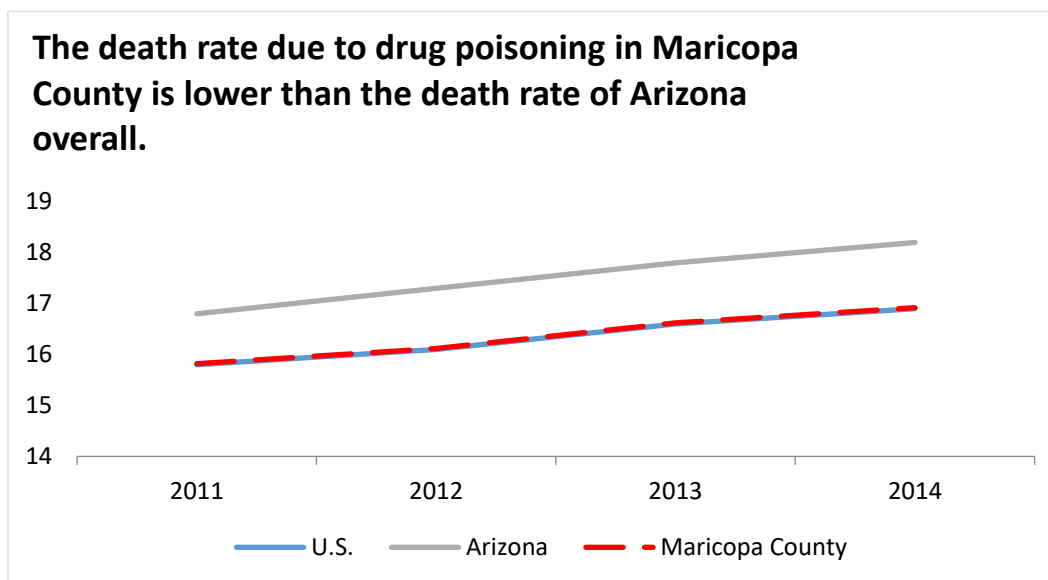
Table: Death Rate per 100,000 Due to Homicide by Age Group,  
Maricopa County, 2010-2014

	2010	2011	2012	2013	2014
0 to 4	2.8	3.6	2.2	1.8	2.9
4 to 9	1.1	0.0	0.7	0.0	1.0
10 to 14	1.1	0.4	0.7	1.7	0.7
15 to 19	6.5	5.2	5.5	6.6	4.7
20 to 24	13.1	11.1	11.9	11.9	9.1
25 to 34	12.4	10.5	8.4	8.8	9.5
35 to 44	7.6	6.1	7.1	7.3	5.2
45 to 54	5.0	6.1	6.4	6.0	6.1
55 to 64	3.0	3.8	2.8	4.6	1.8
65 to 74	1.2	0.7	2.8	1.9	1.8
75+	2.4	3.3	3.2	1.8	0.8

## Drug Poisoning & Opiate Overdose

In 2014, drug poisoning accounted for 1274 deaths in the state of Arizona. Poisoning mortality rates remained highest among African-Indian males aged 45 through 54 years of age. (*Centers for Disease Control and Prevention, 2016*)

The graph below (2011-2014) is a data comparison between the state of Arizona and Maricopa County on deaths due to drug poisoning. The state of Arizona has a higher rate of death cases than in comparison to only Maricopa County.

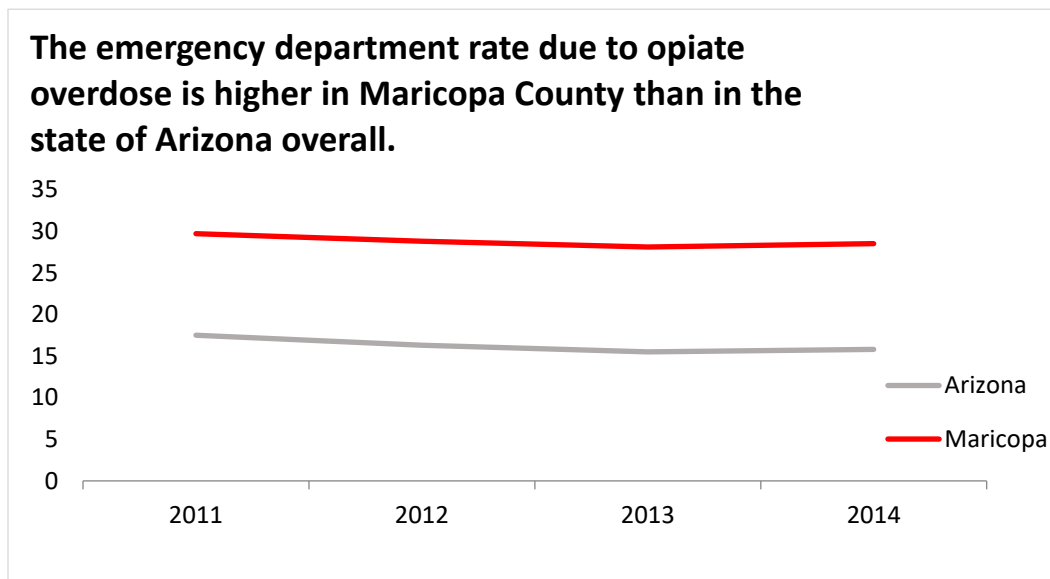


(Arizona Department of Health Services, n.d.), (Centers for Disease Control and Prevention, 2017)

Table: Death Rate per 100,000 Due to Drug Poisoning, 2011-2014				
	2011	2012	2013	2014
U.S.	15.8	16.1	16.6	16.9
Arizona	16.8	17.3	17.8	18.2
Maricopa County	15.8	16.1	16.6	16.9

When it comes to Opiate Overdose, the National Vital Statistics Report from the Centers for Disease Control and Prevention, reports that Opioids are the main reason for drug overdose deaths. In 2015, there were over 33,091 opioid related deaths in the United States. Five states that have the highest rates of opioid deaths include West Virginia, New Hampshire, Kentucky, Ohio, and Rhode Island. (Herone, 2016)

The graph below (2011-2014) is a data comparison between the state of Arizona and Maricopa County on emergency department visits due to opiate related overdoses. Maricopa County has double the rates of the state when it came to opiate related overdose emergency visits.



(Sagna, Gupta, & Torres, Hospital Inpatient Discharges & Emergency Room Visits Statistics - For Drug Abuse, 2016)

Table: Emergency Department Visit Rate per 100,000 Due to Opiate Overdose, Maricopa County, 2011-2014				
	2011	2012	2013	2014
Arizona	17.5	16.3	15.5	15.8
Maricopa County	29.7	28.8	28.1	28.5

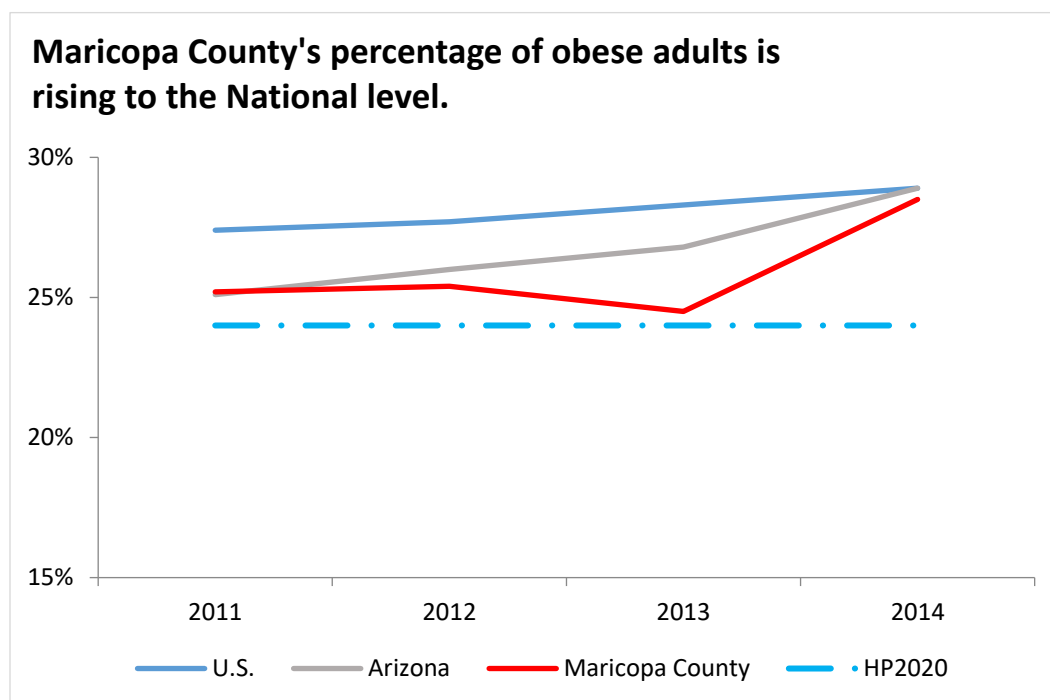
## Morbidity:

Morbidity refers to the state of being diseased or unhealthy within a single population. Morbidity rates look at the incidence of a disease across a population and/or geographic location during a single year, and can vary depending on the disease in question. Some diseases can also affect one demographic more than another. Having access to Morbidity data can help medical professionals, scientists, and public health officials calculate risks and make recommendations to the public.

## Obesity

According to the Centers for Disease Control and Prevention, obesity is considered a common, serious and costly condition. Over one-third of the U.S adult population is considered obese. This is approximately 36.5%. Other conditions related to obesity include heart disease, type 2 diabetes, stroke, and certain types of cancers. In 2008, the estimated annual medical cost of obesity was at \$147 billion U.S dollars. (*Centers for Disease Control and Prevention, 2016*)

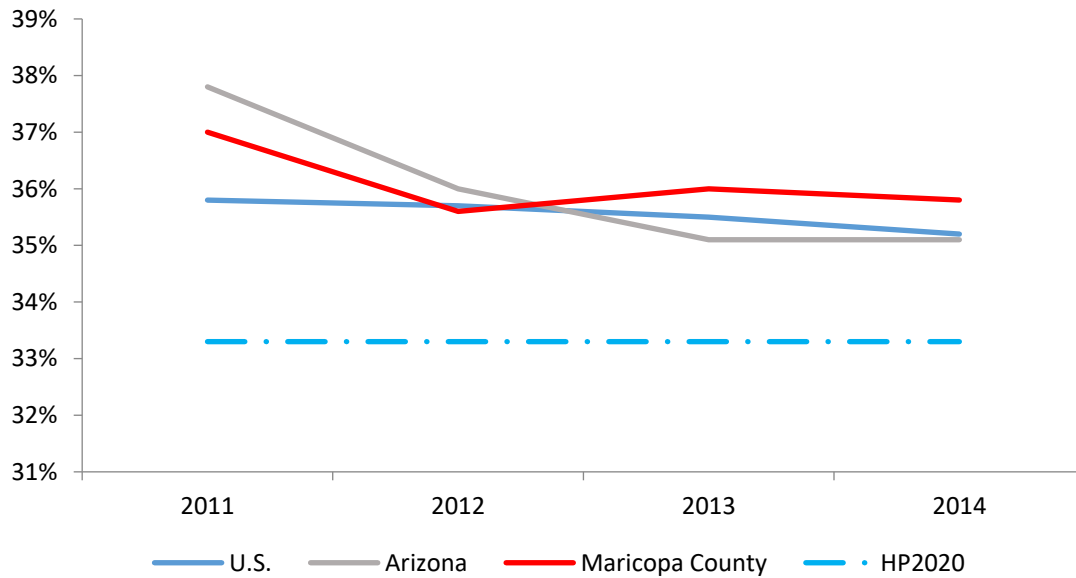
The graph below is a comparison of adult obesity rates (from 2011 through 2014), across the United States, Arizona, and Maricopa County. The data shows that in 2014 obesity rates averaged close to 30% across the board.



(Blackwell, Bass, Bishop, & Hussaini, 2012), (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014), (Office of Disease Prevention and Health Promotion, 2017), (Arizona Department of Health Services, n.d.)

Table: Percentage of Obese Adults, 2011-2014				
	2011	2012	2013	2014
U.S.	27.4%	27.7%	28.3%	28.9%
Arizona	25.1%	26.0%	26.8%	28.9%
Maricopa County	25.2%	25.4%	24.5%	28.5%
Healthy People 2020	24.0%	24.0%	24.0%	24.0%

**In 2013, the percentage of overweight adults in Maricopa County surpassed the percentage for Arizona and the Nation.**



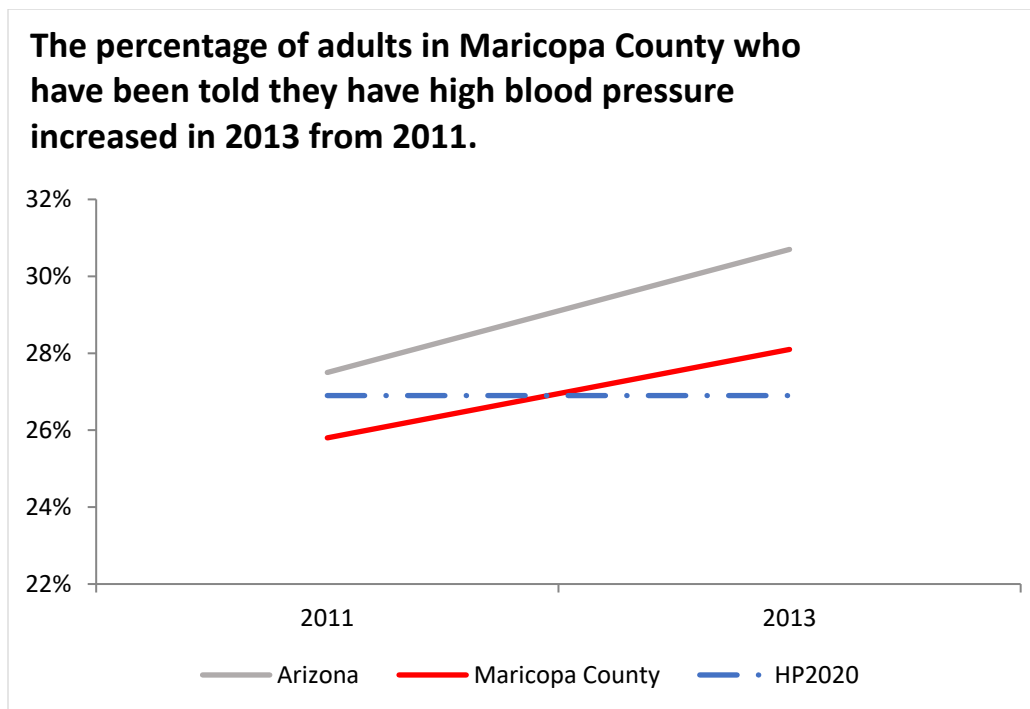
(Blackwell, Bass, Bishop, & Hussaini, 2012), (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014), (Arizona Health Matters, n.d.), (Arizona Department of Health Services, n.d.)

Table: Percentage of Adults Overweight, 2011-2014				
	2011	2012	2013	2014
U.S.	35.8%	35.8%	35.4%	35.4%
Arizona	37.8%	36.0%	35.0%	35.1%
Maricopa County	37.0%	35.6%	36.0%	35.8%
Healthy People 2020	33.3%	33.3%	33.3%	33.3%

## High Blood Pressure & Cholesterol

According to the Center for Disease Control, approximately 68 million people have high blood pressure and 71 million US adults have high cholesterol. These diseases are known to be leading causes of health disparities in the United States. One out of every three adults have high blood pressure and high cholesterol. (*Centers for Disease Control and Prevention, 2011*)

The graphs below represent the state of Arizona, Maricopa County, and Healthy People 2020. They look at the percent of adults with high blood pressure (graph #1) and adults who have had their blood cholesterol checked and have been told that it was high (graph #2).

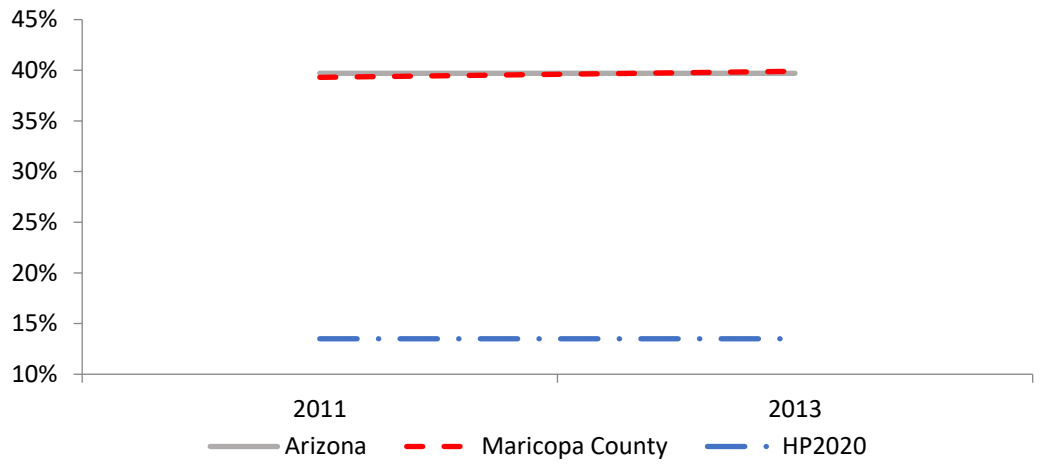


(Office of Disease Prevention and Health Promotion, 2017), (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Bass, Blackwell, & Hussaini, 2011 Arizona Behavioral Risk Factor Surveillance Survey, 2011)

Table: Percentage of Adults with High Blood Pressure, 2011 and 2013

	2011	2013
Arizona	27.5%	30.7%
Maricopa County	25.8%	31.7%
Healthy People 2020	26.9%	26.9%

**The percentage of adults in Maricopa County who have been told that their blood pressure is high is consistent around 40%.**



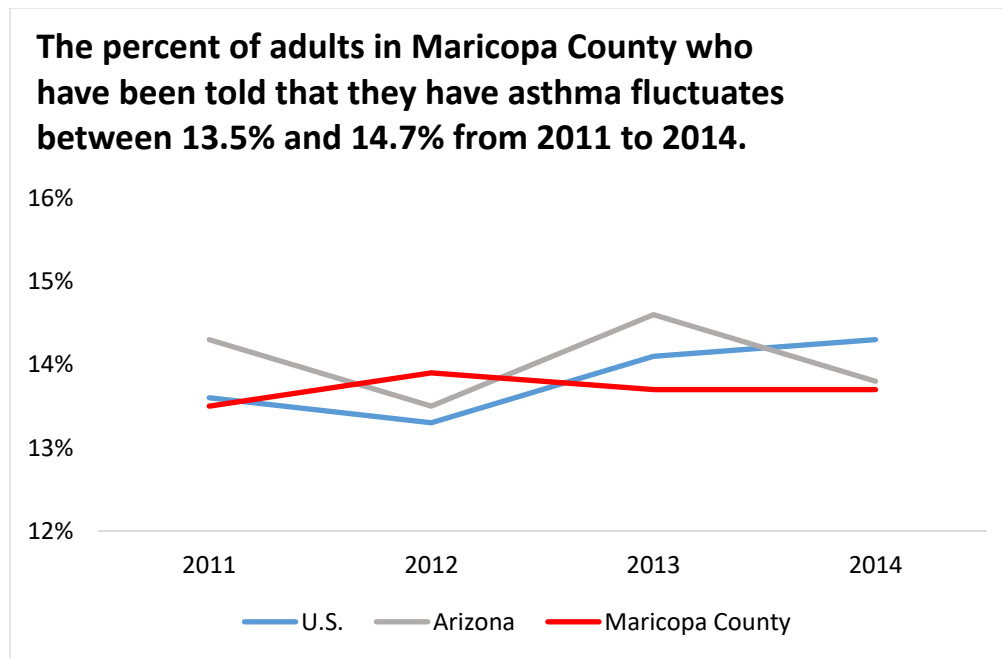
(Office of Disease Prevention and Health Promotion, 2017), (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Bass, Blackwell, & Hussaini, 2011 Arizona Behavioral Risk Factor Surveillance Survey, 2011)

**Table: Percentage of Adults with High Cholesterol, 2011-2014**

	2011	2013
Arizona	39.7%	39.7%
Maricopa County	39.3%	40.3%
Healthy People 2020	13.5%	13.5%

## Asthma

Asthma is a chronic disease that has no cure. When asthma is triggered the airways in the lungs become inflamed, making it difficult to breathe. According to the Centers for Disease Control and Prevention, asthma is a serious health and economic burden in the United States. It costs the United States \$56 billion each year, and asthma has caused millions of cases to miss days of school or work. In the last decade, hospitalizations, emergency department visits, and doctor visits have risen by nearly 15%. (*Centers for Disease Control and Prevention, 2016*)



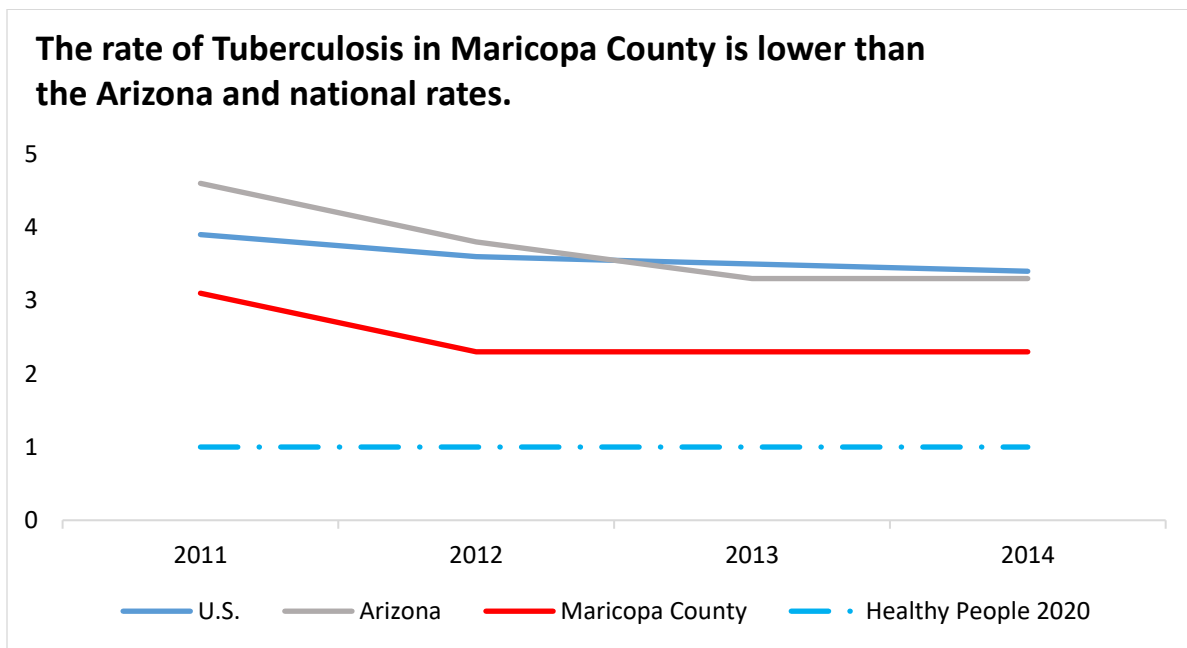
(Bass J. B., 2011) (Blackwell, Bass, Bishop, & Hussaini, 2012) (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013) (Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014)

Table: Percentage of Adults with Asthma, 2011-2014				
	2011	2012	2013	2014
U.S.	13.6%	13.3%	14.1%	14.3%
Arizona	14.3%	13.5%	14.6%	13.8%
Maricopa County	13.5%	13.9%	13.7%	13.7%

## Tuberculosis

Tuberculosis is one of the world's deadliest diseases. According to the Centers for Disease Control and Prevention, one- third of the world's population is infected with TB. In 2015, 10.4 million people became sick with TB and with over 1.8 million TB-related deaths. In addition, TB is a leading killer of people who are HIV infected. An estimate of 9,557 TB cases were reported in the United States in 2015. (*Center for Disease Control and Prevention, 2017*)

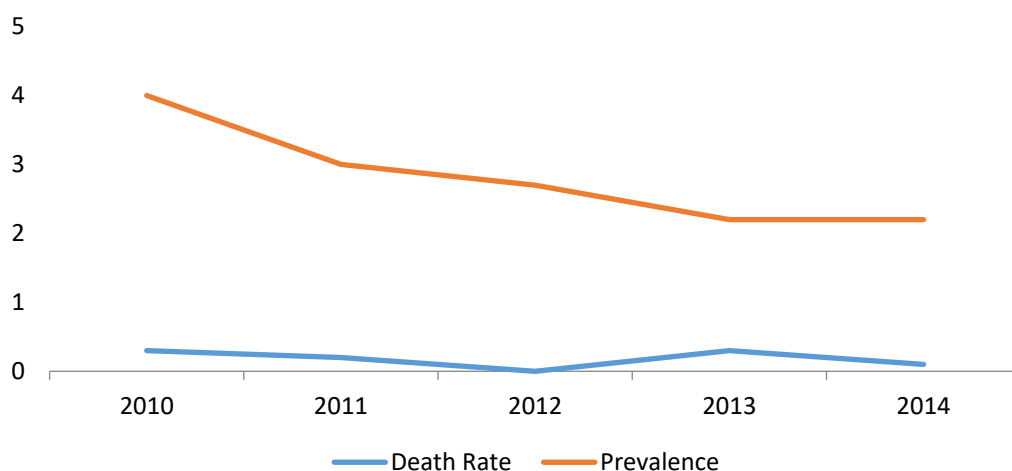
The graphs below are a comparison of the rate of Tuberculosis between the United States, Arizona, and Maricopa County. In 2014, the United States and the state of Arizona had almost the same rate of TB cases. TB rates seem to be more prevalent among white male groups that are 65+ years of age.



(Office of Disease Prevention and Health Promotion, 2017), (Centers for Disease Control and Prevention, n.d.)

Table: Rate per 100,000 of Tuberculosis, 2011-2014				
	2011	2012	2013	2014
U.S.	3.9	3.6	3.5	3.4
Arizona	4.6	3.8	3.3	3.3
Maricopa County	3.1	2.3	2.3	2.3
Healthy People 2020	1.0	1.0	1.0	1.0

**The death rate due to Tuberculosis in Maricopa County is much lower than the prevalence rate.**

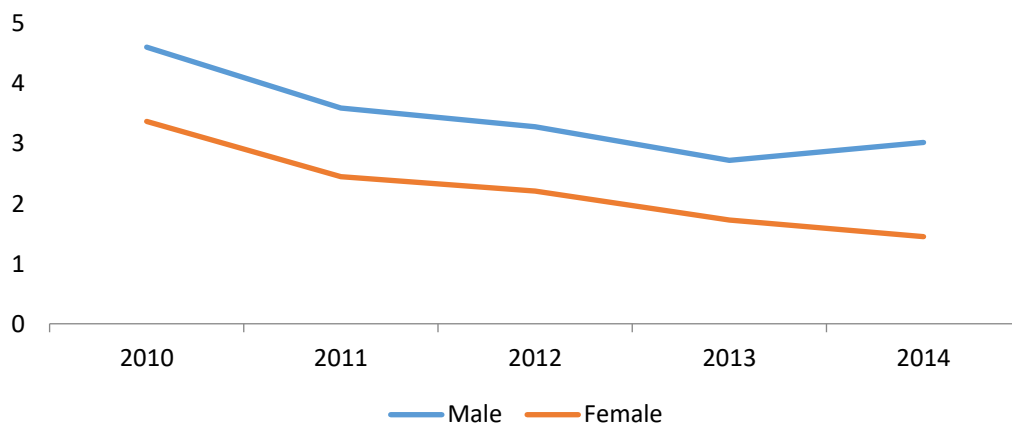


(Arizona Department of Health Services, n.d.)

**Table: Prevalence and Death Rates per 100,000 Due to Tuberculosis, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Death Rate	0.3	0.2	0.0	0.3	0.1
Prevalence	4.0	3.0	2.7	2.2	2.2

**The rate of Tuberculosis in Maricopa County is higher among males than females.**

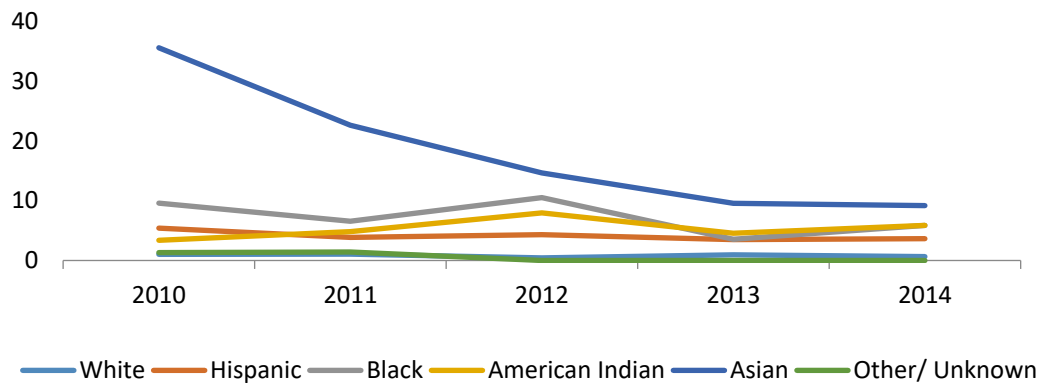


(Arizona Department of Health Services, n.d.)

**Table: Rate per 100,000 of Tuberculosis by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	4.6	3.6	3.3	2.7	3.0
Female	3.4	2.4	2.2	1.7	1.5

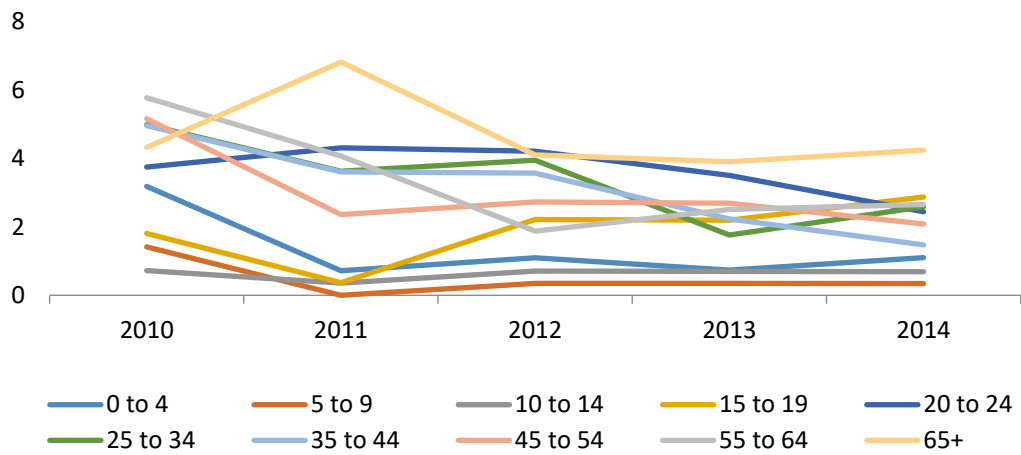
**The rate of Tuberculosis in Maricopa County is highest among the Asian population but decreasing overall from 2010 to 2014.**



(Arizona Department of Health Services, n.d.)

Table: Rate per 100,000 of Tuberculosis by Race, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
White	1.0	1.1	0.4	1.0	0.6
Hispanic	5.4	3.9	4.3	3.5	3.6
Black	9.6	6.6	10.5	3.5	5.9
American Indian	3.4	4.8	8.0	4.6	5.9
Asian	35.5	22.6	14.6	9.6	9.2
Other/unknown	1.3	1.4	0.0	0.0	0.0

**The rate of Tuberculosis in Maricopa County is consistently higher among those aged 65+.**



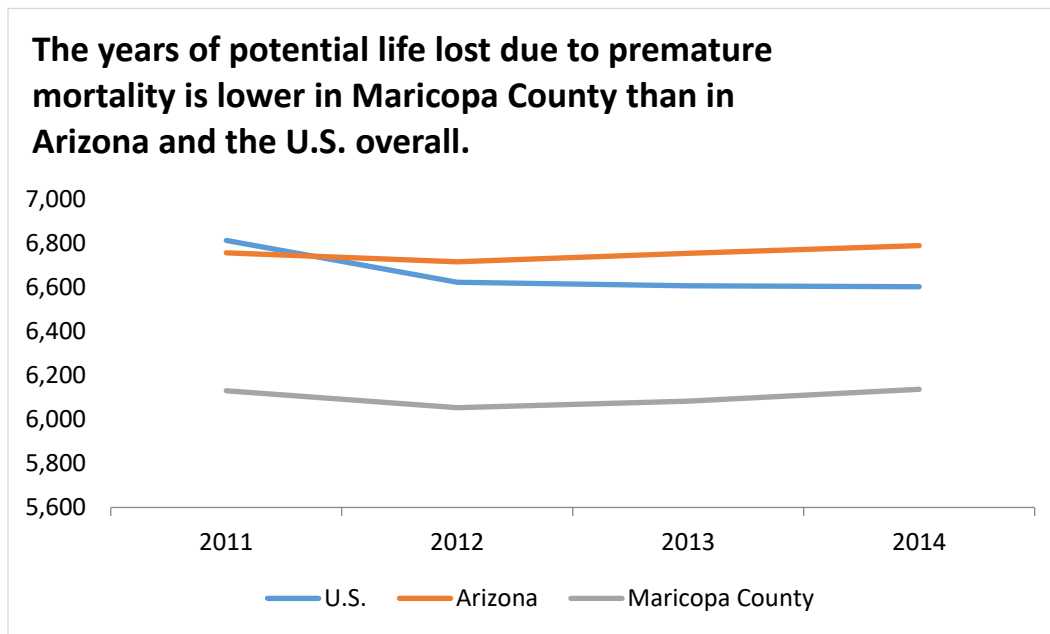
(Arizona Department of Health Services, n.d.)

Table: Rate per 100,000 of Tuberculosis by Age Group, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
0-4	3.2	0.7	1.1	0.7	1.1
5-9	1.4	0.0	0.3	0.3	0.3
10-14	0.7	0.4	0.7	0.7	0.7
15-19	1.8	0.4	2.2	2.2	2.9
20-24	3.7	4.3	4.2	3.5	2.4
25-34	5.0	3.6	3.9	1.8	2.6
35-44	5.0	3.6	3.6	2.2	1.5
45-54	5.2	2.4	2.7	2.7	2.1
55-64	5.8	4.1	1.9	2.5	2.7
65+	4.3	6.8	4.1	3.9	4.2

## Premature Mortality and Infant Mortality

According to the Centers for Disease Control and Prevention, in 2014, over 23, 000 infants died in the United States. The infant mortality rate is the number of infant deaths that occur for every 1,000 live births. This rate is often used as an indicator to measure the health and well-being of a nation because factors affecting the health of entire populations can also impact the mortality rate of infants. (*Centers for Disease Control and Prevention, 2016*)

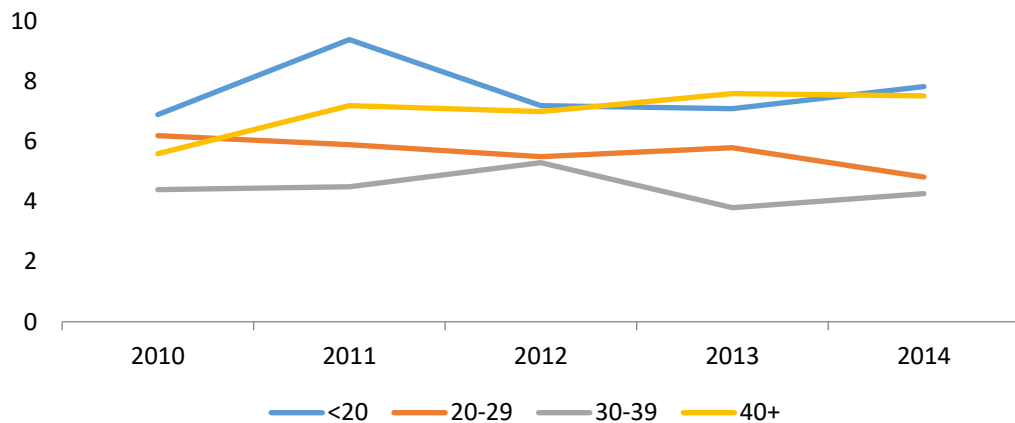
The graphs below are a comparison of potential life lost due to Premature Mortality at the national, state, and local level (2011-2014). The State of Arizona shows to have higher years of mortality than the United States and Maricopa County. Infant mortality rates are higher in teenage mothers younger than 20 years old, and among African American mothers with the average rate of 11.6 per 1,000 births.



(Arizona Department of Health Services, n.d.), (Centers for Disease Control and Prevention, 2017)

Table: Years of Potential Life Lost Due to Premature Mortality, 2011-2014				
	2011	2012	2013	2014
U.S.	6,811.2	6,621.6	6,605.3	6,601.2
Arizona	6,754.9	6,714.3	6,752.5	6,787.7
Maricopa County	6,129.6	6,052.5	6,082.0	6,136.0

**The infant mortality rate in Maricopa County is highest among mothers <20 and 40+ years of age.**

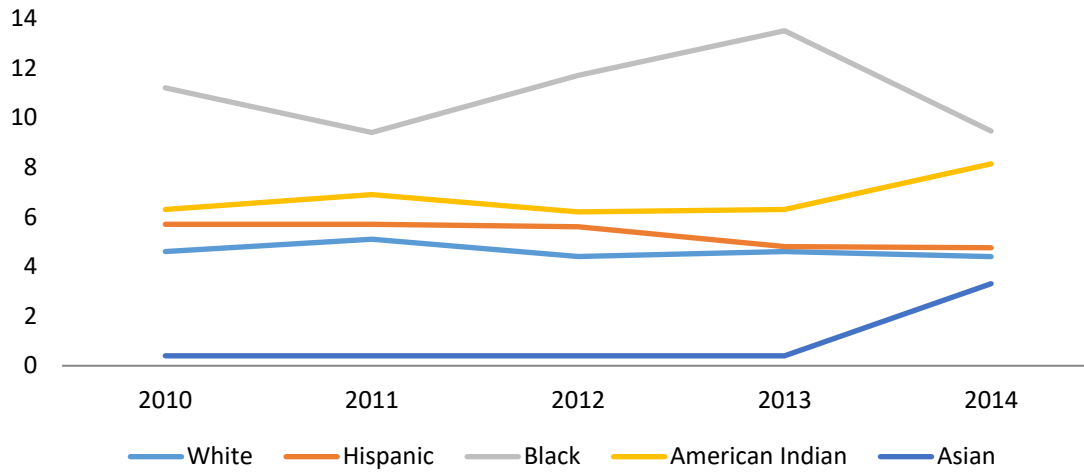


(Arizona Department of Health Services, n.d.)

**Table: Infant Mortality Rate per 1,000 Births Based on Age of Mother, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
<20	6.9	9.4	7.2	7.1	7.8
20-29	6.2	5.9	5.5	5.8	4.8
30-39	4.4	4.5	5.3	3.8	4.3
40+	5.6	7.2	7.0	7.6	7.5

**The infant mortality rate in Maricopa County is highest among the black population.**



**Table: Infant Mortality Rate per 1,000 Births Based on Race/Ethnicity, Maricopa County, 2010-2014**

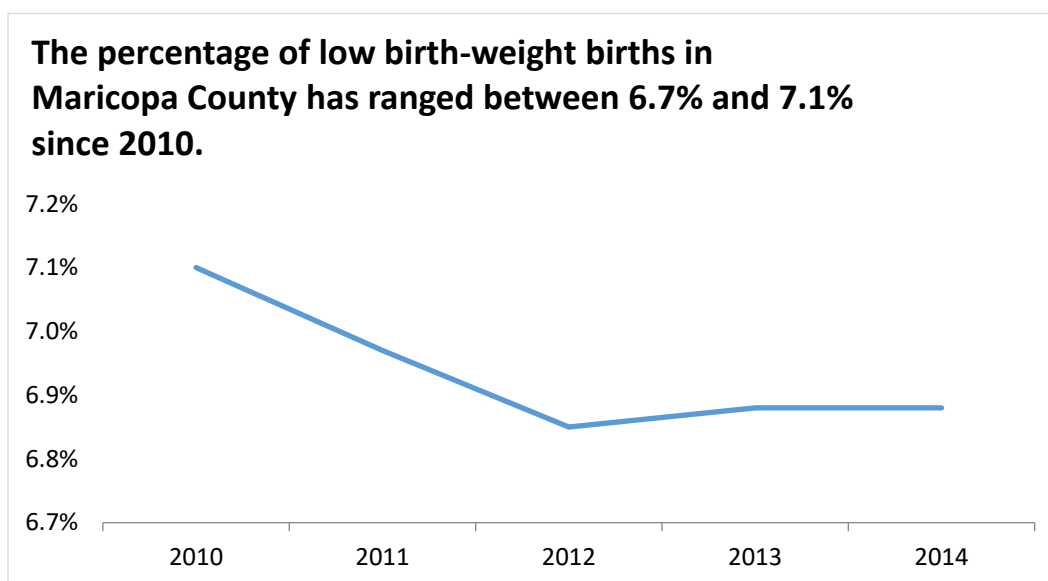
	2010	2011	2012	2013	2014
White	4.6	5.1	4.4	4.6	4.4
Hispanic	5.7	5.7	5.6	4.8	4.8
Black	11.2	9.4	11.7	13.5	9.5
American Indian	6.3	6.9	6.2	6.3	8.1
Asian	0.4	0.4	0.4	0.4	3.3

(Arizona Department of Health Services, n.d.)

## Low Birth-Weight Infants

Low birth weight infants are more likely to have health problems and seek specialized medical care in the neonatal intensive care unit compared to babies born at a normal weight. Premature birth and restriction of fetal growth are the leading causes to low birth weight. Both causes are influenced by the mother's health and genetics. To prevent the births of low weight infants, expecting mothers are recommended to seek prenatal care, take prenatal vitamins, and cease smoking, drinking alcohol and using drugs. (*Arizona Health Matters, 2017*)

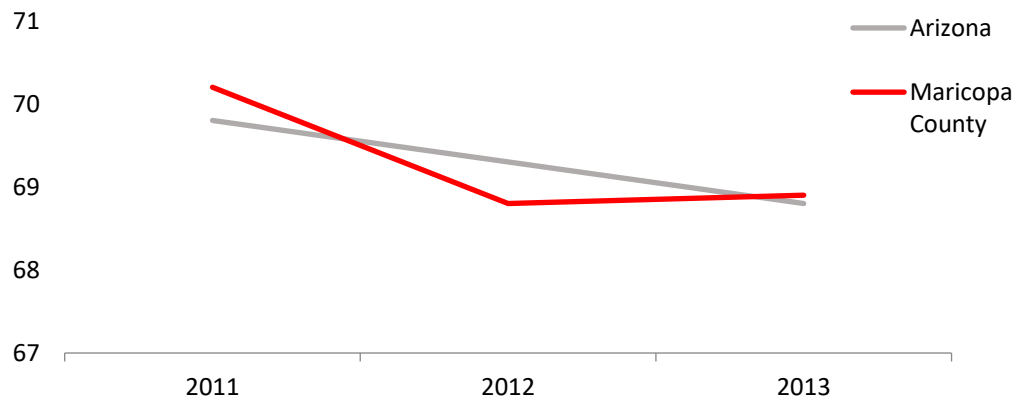
The rate of low birth weight infants in Maricopa County has gradually decreased since 2010 and has plateaued between 2013 and 2014. The prominent race group for delivering low birth weight infants are the African American population, and low birth weight infants who are delivered by women in the age group of 45+.



(Arizona Department of Health Services, n.d.)

Table: Percent of Low Birth-Weight Births, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
Maricopa County	7.1%	7.0%	6.9%	6.9%	6.9%

**The rate of low birth-weight infants (<2,500 grams) in Maricopa County dropped in 2012 but rose slightly in 2013.**

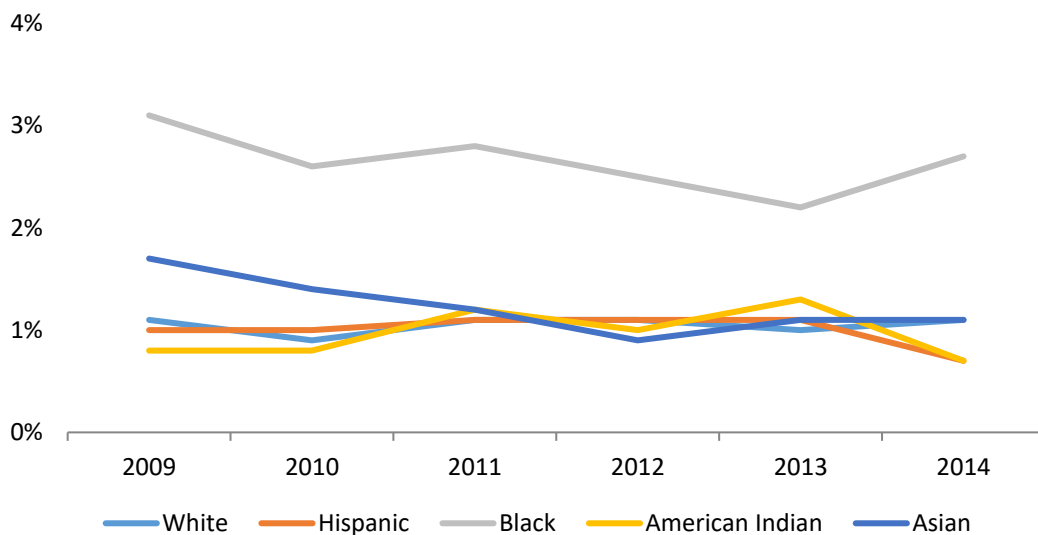


(Arizona Department of Health Services, n.d.), (Arizona Department of Health Services, n.d.)

**Table: Rate per 1,000 of Low Birth-Weight Infants (<2,500 Grams), 2011-2013**

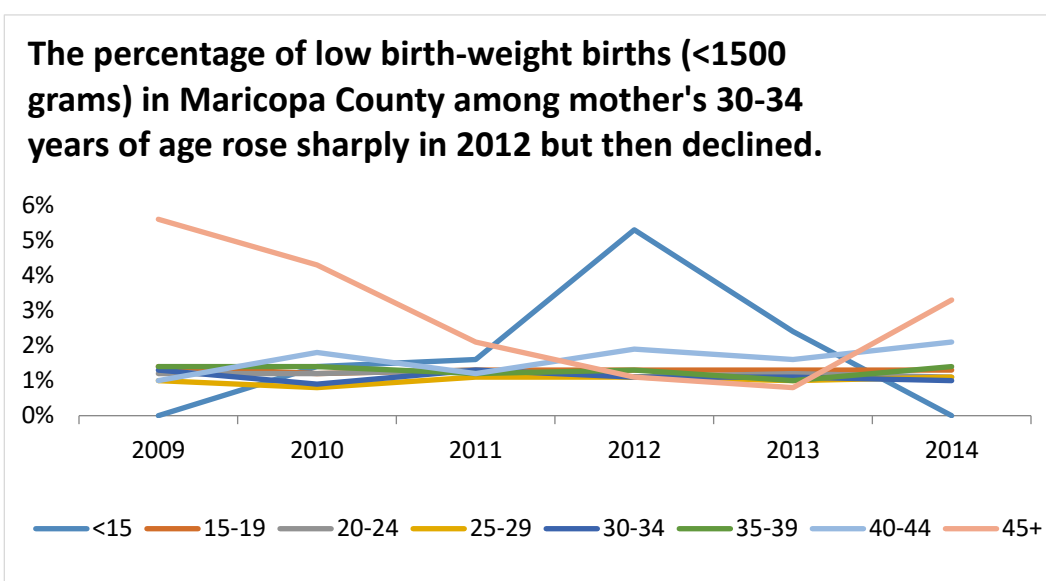
	2011	2012	2013
Arizona	69.8	69.3	68.8
Maricopa County	70.2	68.8	68.9

**The percentage of low birth-weight (<1500 grams) in Maricopa County is highest among blacks.**



(Arizona Department of Health Services, n.d.)

Table: Percent of Births Considered Low Birth-Weight (<1,500 Grams) by Mother's Race, Maricopa County, 2009-2014						
	2009	2010	2011	2012	2013	2014
White	1.1%	0.9%	1.1%	1.1%	1.0%	1.1%
Hispanic	1.0%	1.0%	1.1%	1.1%	1.1%	0.7%
Black	3.1%	2.6%	2.8%	2.5%	2.2%	2.7%
American Indian	0.8%	0.8%	1.2%	1.0%	1.3%	0.7%
Asian	1.7%	1.4%	1.2%	0.9%	1.1%	1.1%

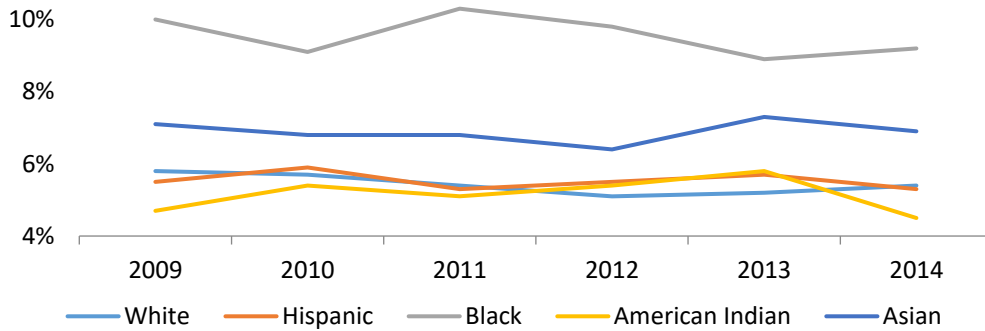


(Arizona Department of Health Services, n.d.)

Table: Percent of Births Considered Low Birth-Weight (<1,500 Grams) by Mother's Age Group, Maricopa County, 2009-2014						
	2009	2010	2011	2012	2013	2014
<15	0.0%	1.4%	1.6%	5.3%	2.4%	0.0%
15-19	1.4%	1.2%	1.3%	1.3%	1.3%	1.3%
20-24	1.2%	1.2%	1.3%	1.1%	1.2%	1.1%
25-29	1.0%	0.8%	1.1%	1.1%	1.1%	1.0%
30-34	1.3%	0.9%	1.3%	1.1%	1.1%	1.0%
35-39	1.4%	1.4%	1.2%	1.3%	1.0%	1.4%
40-44	1.0%	1.8%	1.2%	1.9%	1.6%	2.1%
45+	5.6%	4.3%	2.1%	1.1%	0.8%	3.3%

**The percentage of low birth-weight births (1500-2499 grams) in Maricopa County is highest among the black population.**

12%

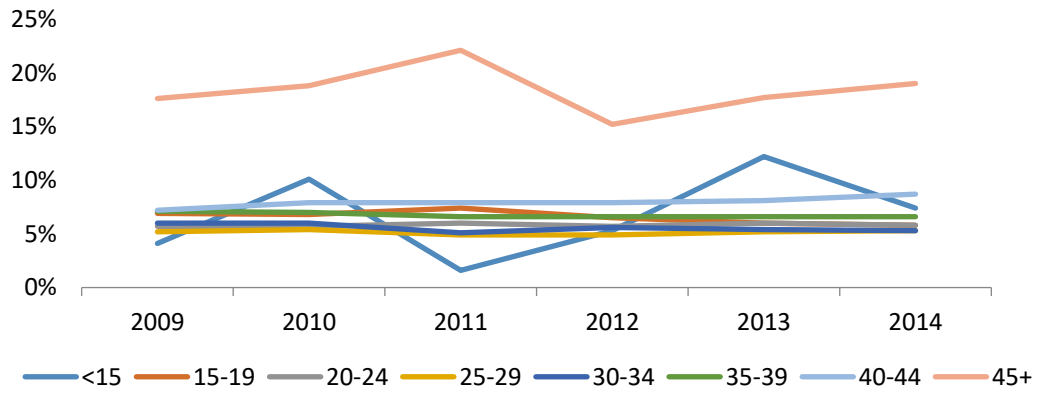


(Arizona Department of Health Services, n.d.)

**Table: Percent of Births Considered Low Birth-Weight (Born 1500-2499 Grams) by Mother's Race, Maricopa County, 2009-2014**

	2009	2010	2011	2012	2013	2014
White	5.8%	5.7%	5.4%	5.1%	5.2%	5.4%
Hispanic	5.5%	5.9%	5.3%	5.5%	5.7%	5.3%
Black	10.0%	9.1%	10.3%	9.8%	8.9%	9.2%
American Indian	4.7%	5.4%	5.1%	5.4%	5.8%	4.5%
Asian	7.1%	6.8%	6.8%	6.4%	7.3%	6.9%

**The percentage of low birth-weight (1500-2499 grams) in Maricopa County is highest among mothers 15-19 years of age.**



(Arizona Department of Health Services, n.d.)

**Table: Percent of Births Considered Low Birth-Weight (1,500-2,499 Grams) by Mother's Age Group, Maricopa County, 2009-2014**

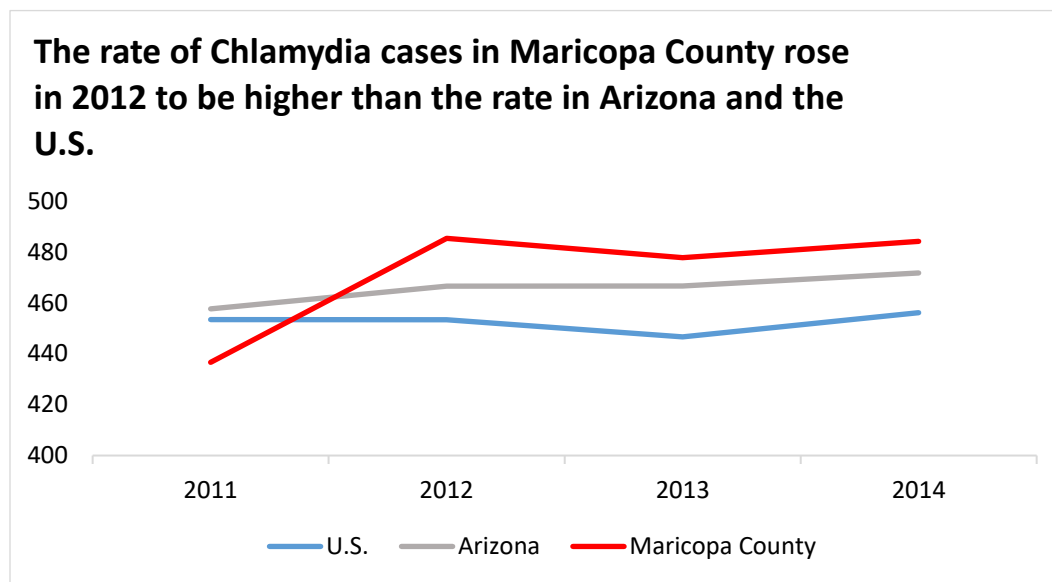
	2009	2010	2011	2012	2013	2014
<15	4.1%	10.1%	1.6%	5.3%	12.2%	7.4%
15-19	6.9%	6.8%	7.4%	6.5%	6.0%	5.8%
20-24	5.7%	5.7%	6.0%	5.7%	6.0%	5.8%
25-29	5.2%	5.4%	4.9%	4.9%	5.2%	5.3%
30-34	6.0%	6.0%	5.1%	5.6%	5.4%	5.3%
35-39	7.1%	7.0%	6.6%	6.6%	6.6%	6.6%
40-44	7.2%	7.9%	7.9%	7.9%	8.1%	8.7%
45+	17.6%	18.8%	22.1%	15.2%	17.7%	19.0%

## Sexually Transmitted Diseases

### Chlamydia

According to the National Center for Health Statistics report from the Centers for Diseases Control and Prevention, in 2013, over 1.4 million cases were reported for chlamydia in the United States. (*Herone, 2016*)

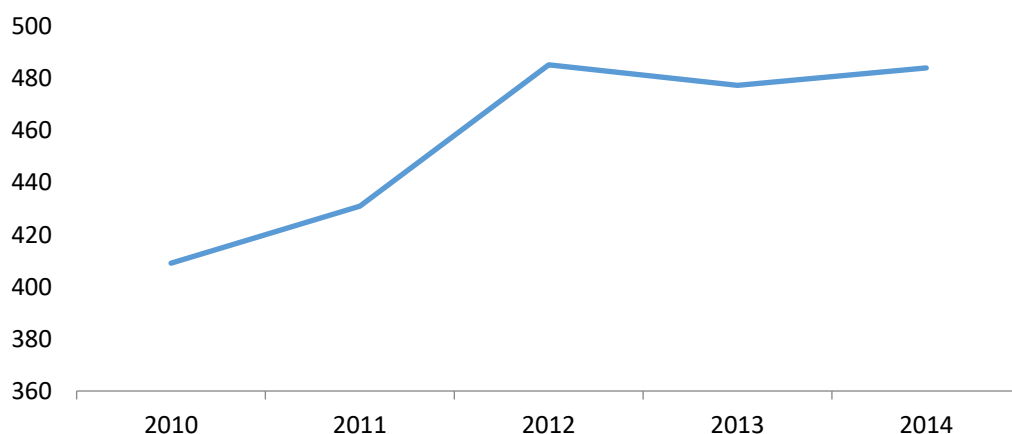
The graphs below show rates of chlamydia cases between 2010 and 2014. In Maricopa County, the number of chlamydia cases exceed the national rate followed by the state of Arizona. Within Maricopa County, the prevalence of chlamydia cases continues to increase over time. Cases are higher in female groups and the age group 20-24.



(Arizona Health Matters, n.d.), (Arizona Department of Health Services, n.d.)

Table: Rate per 100,000 of Chlamydia Cases, 2011-2014				
	2011	2012	2013	2014
U.S.	453.4	453.3	446.6	456.1
Arizona	457.6	466.5	466.6	471.7
Maricopa County	436.6	485.3	477.7	484.1

**The prevalence rate of Chlamydia has been increasing in Maricopa County.**

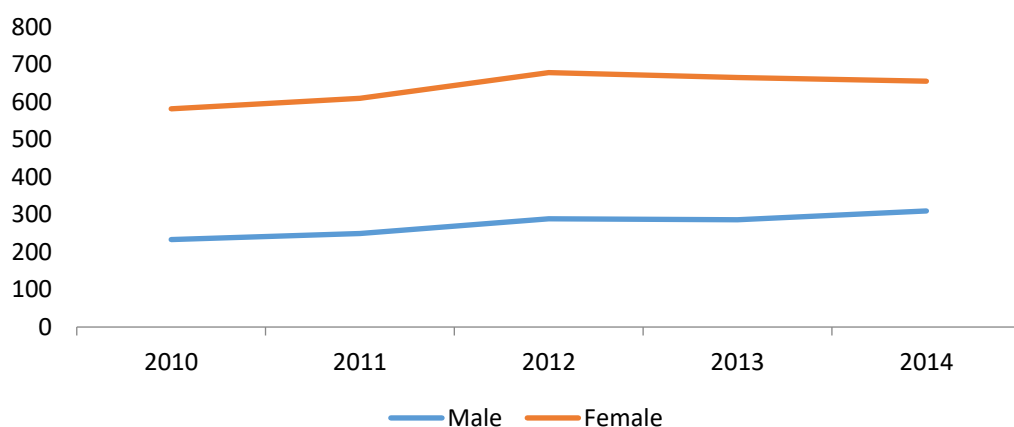


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

**Table: Prevalence Rate per 100,000 of Chlamydia, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Prevalence	409.1	431.0	485.3	477.4	484.1

**The prevalence rate of Chlamydia in Maricopa County is higher among females than males.**

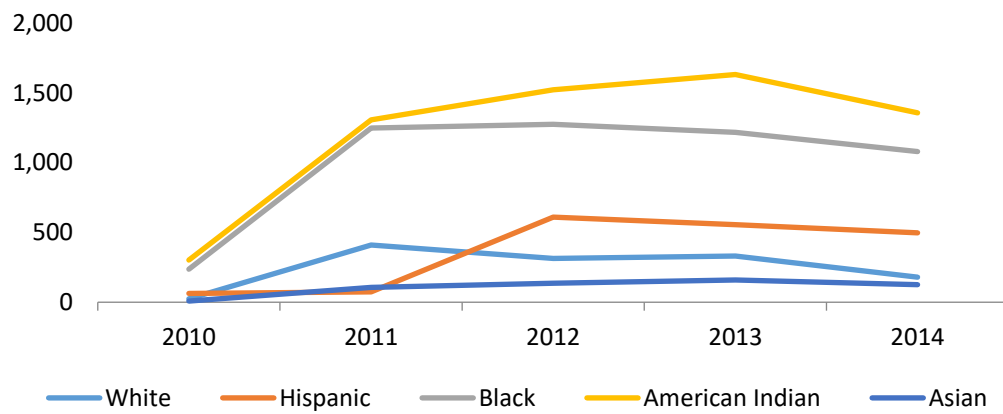


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

**Table: Prevalence Rate per 100,000 of Chlamydia by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	233.1	249.1	288.5	285.8	309.3
Female	581.4	609.3	678.0	665.1	655.0

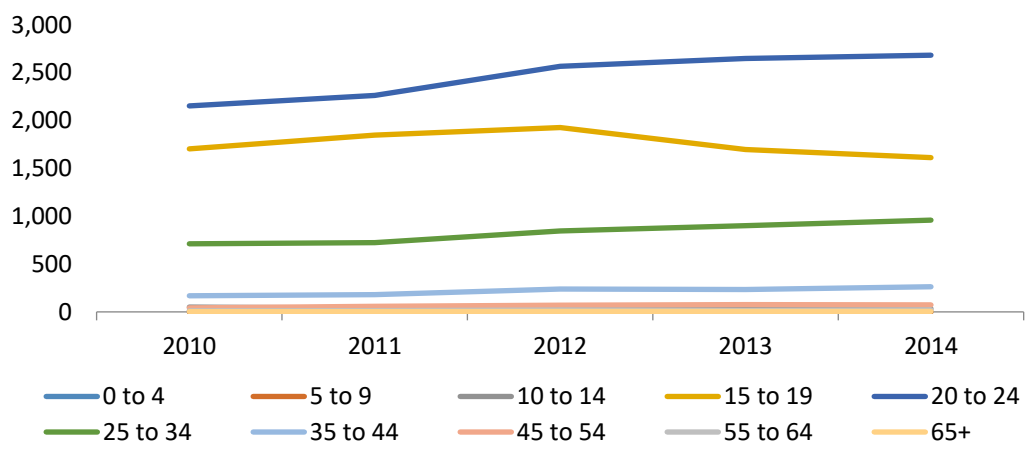
**The prevalence rate of Chlamydia in Maricopa County is highest among the American Indian population.**



(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

Table: Prevalence Rate per 100,000 of Chlamydia by Race, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
White	24.3	409.9	313.9	331.0	179.8
Hispanic	62.9	74.6	609.7	555.3	497.6
Black	236.6	1,248.3	1,274.9	1,217.4	1,079.5
American Indian	302.1	1,306.6	1,522.4	1,631.8	1,356.9
Asian	8.1	105.9	136.4	159.4	125.9

**The prevalence rate of Chlamydia in Maricopa County is highest among the age group 20-24.**



(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

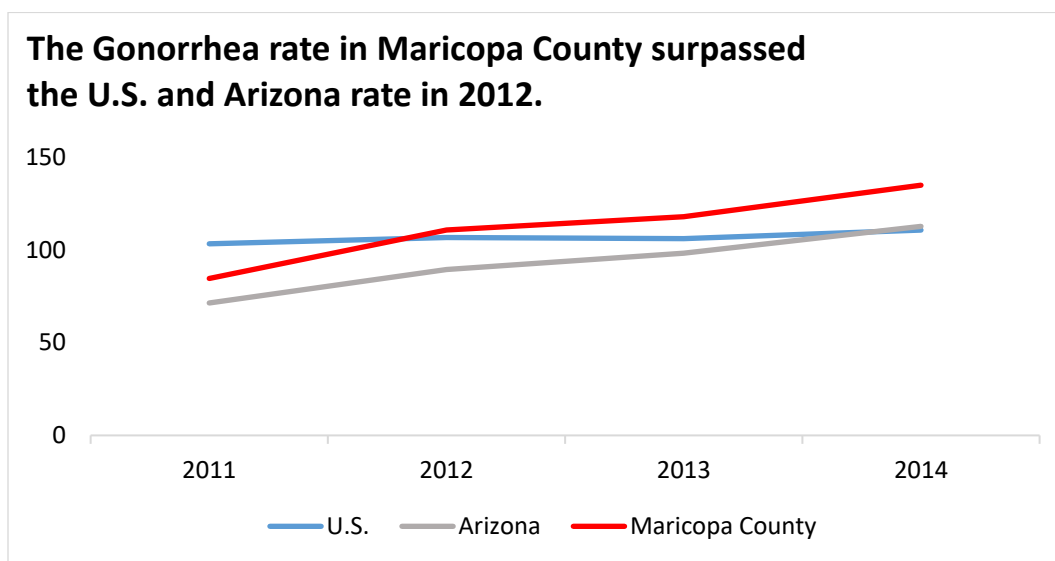
**Table: Prevalence Rate per 100,000 of Chlamydia by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0-4	3.2	1.4	2.2	0.4	0.4
5-9	0.7	0.4	0.0	0.0	0.3
10-14	50.5	39.5	46.9	29.0	35.6
15-19	1,703.9	1,846.4	1,926.3	1,696.8	1,612.1
20-24	2,152.3	2,262.6	2,566.0	2,648.2	2,682.3
25-34	711.5	722.9	846.5	900.4	958.9
35-44	168.3	179.5	238.7	233.8	262.8
45-54	41.5	57.8	69.9	76.0	73.7
55-64	12.1	13.2	19.0	15.0	21.4
65+	2.8	3.5	4.5	4.8	4.4

## Gonorrhea

According to the National Center for Health Statistics report from the Centers for Disease Control and Prevention, in 2013, over 330 thousand cases were reported for gonorrhea in the United States. (Herone, 2016)

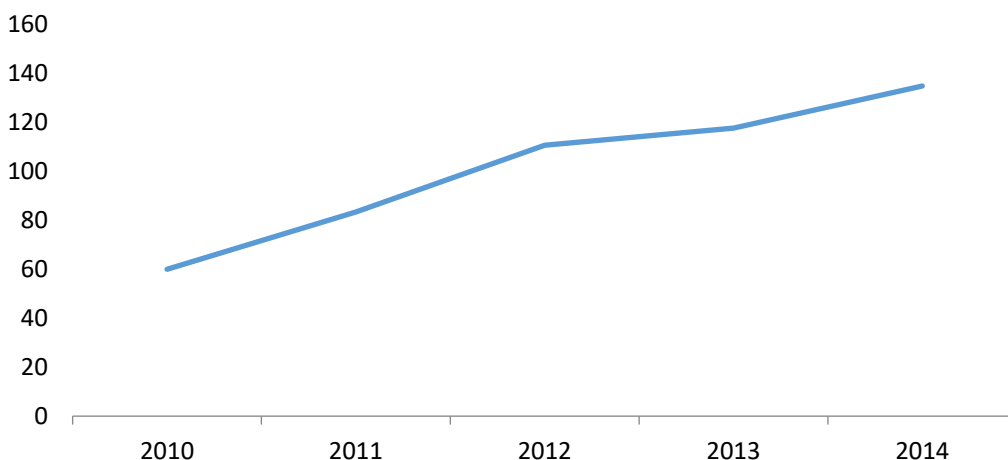
The graphs below show rates of gonorrhea cases between 2010 and 2014. In Maricopa County, the number of gonorrhea cases exceed the state of Arizona's followed by national rates. Within Maricopa County, the prevalence of chlamydia cases continues to increase over time. Cases are higher in males and those in the age group 20-24.



(Arizona Health Matters, n.d.), (Arizona Department of Health Services, n.d.)

Table: Gonorrhea Rate per 100,000, 2011-2014				
	2011	2012	2013	2014
U.S.	103.3	106.7	106.1	110.7
Arizona	71.4	89.4	98.2	112.7
Maricopa County	84.6	110.7	117.9	134.9

## The prevalence rate of Gonorrhea in Maricopa County has been steadily increasing.

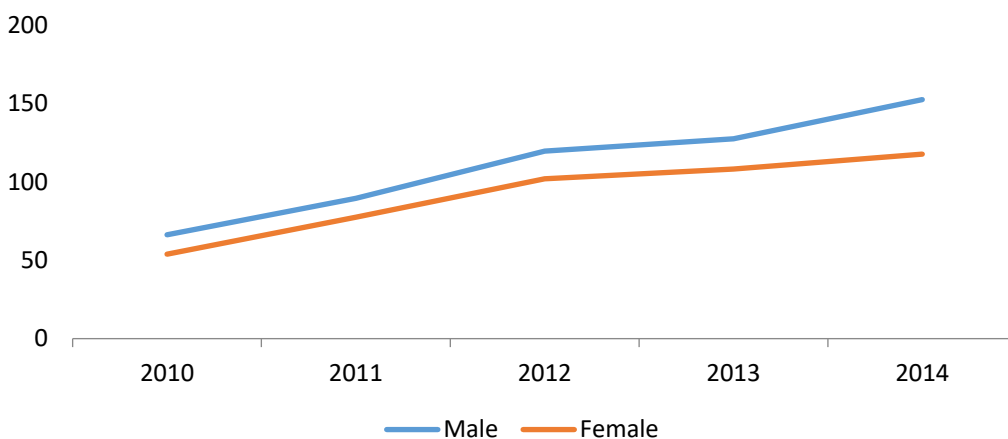


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

Table: Prevalence Rate per 100,000 of Gonorrhea, Maricopa County, 2010-2014

	2010	2011	2012	2013	2014
Prevalence	60.0	83.4	110.7	117.7	134.9

## The prevalence rate of Gonorrhea in Maricopa County is higher among males than females.

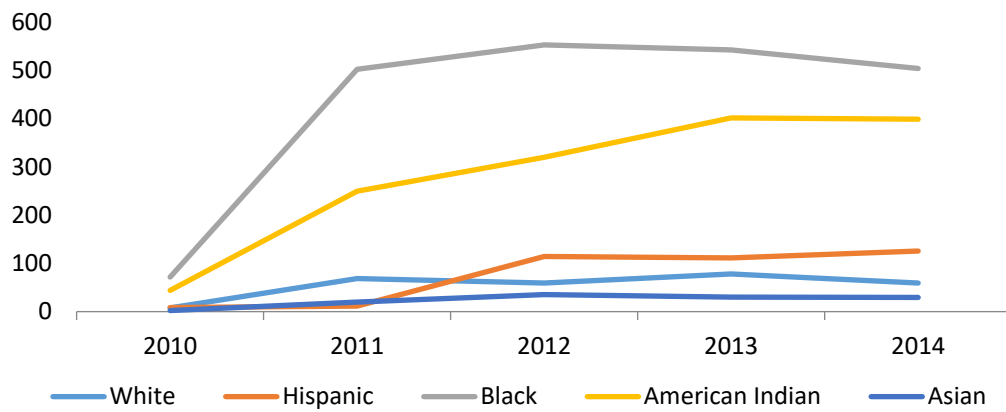


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

Table: Prevalence Rate per 100,00 of Gonorrhea by Gender, Maricopa County, 2010-2014

	2010	2011	2012	2013	2014
Male	66.2	89.5	119.6	127.5	152.5
Female	53.9	77.4	102.0	108.1	117.7

**The prevalence rate of Gonorrhea in Maricopa County is highest among the Black population.**

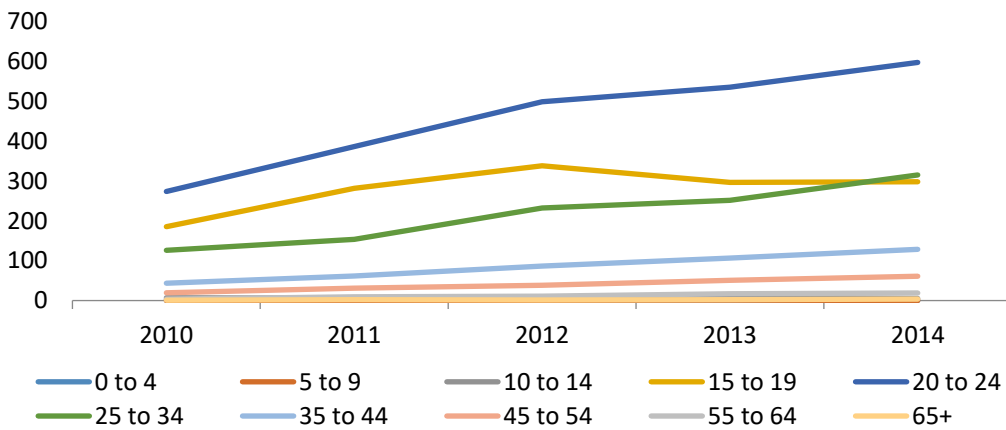


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

**Table: Prevalence Rate per 100,000 of Gonorrhea by Race, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
White	7.7	68.3	59.3	78.0	59.0
Hispanic	8.4	11.6	114.3	111.2	125.5
Black	71.6	501.7	552.3	542.1	503.6
American Indian	43.9	249.4	319.7	401.1	398.6
Asian	2.2	19.8	35.3	30.0	29.3

**The prevalence rate of Gonorrhea in Maricopa County is highest among the age group 20-24.**



(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

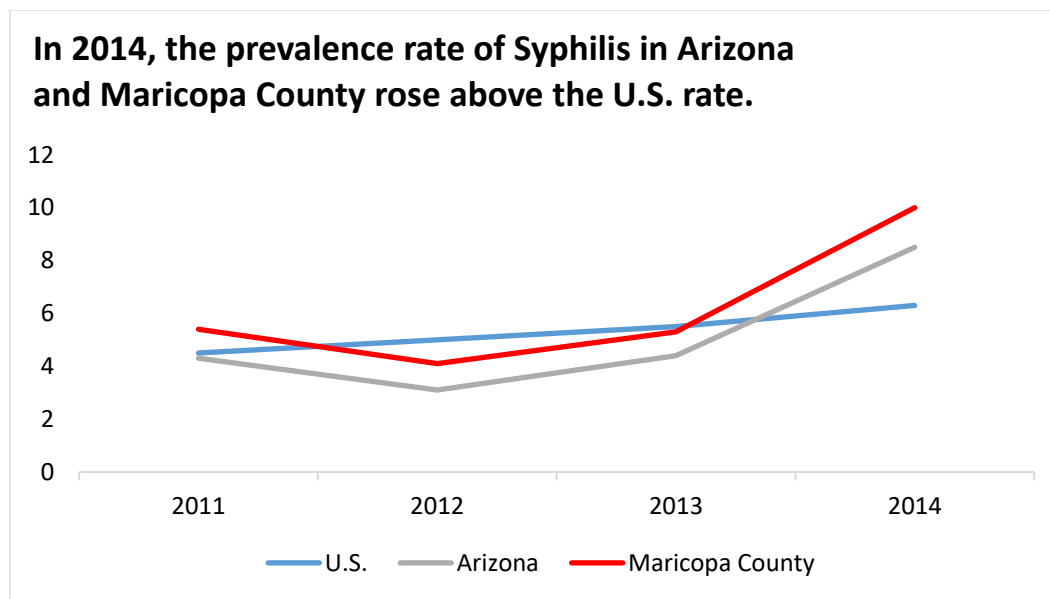
**Table: Prevalence Rate per 100,000 of Gonorrhea by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0-4	0.7	0.4	0.0	1.1	0.4
5-9	0.0	0.4	0.7	1.0	0.0
10-14	6.9	5.7	6.0	8.4	5.2
15-19	185.3	281.4	338.0	296.2	298.1
20-24	273.5	86.4	498.7	535.3	597.3
25-34	126.0	153.3	232.2	251.5	315.0
35-44	43.5	61.5	86.7	106.5	128.5
45-54	19.4	31.2	38.2	50.6	61.0
55-64	3.5	9.6	11.0	17.1	19.0
65+	0.9	2.1	1.6	2.2	3.7

## Syphilis

According to the National Center for Health Statistics report from the Centers for Disease Control and Prevention, syphilis is a sexually transmitted infection that can cause serious health problems if it is not treated. Syphilis is divided into stages (primary, secondary, latent, and tertiary), and there are different signs and symptoms associated with each stage. In 2013, over 56 thousand cases were reported for syphilis in the United States. (Herone, 2016)

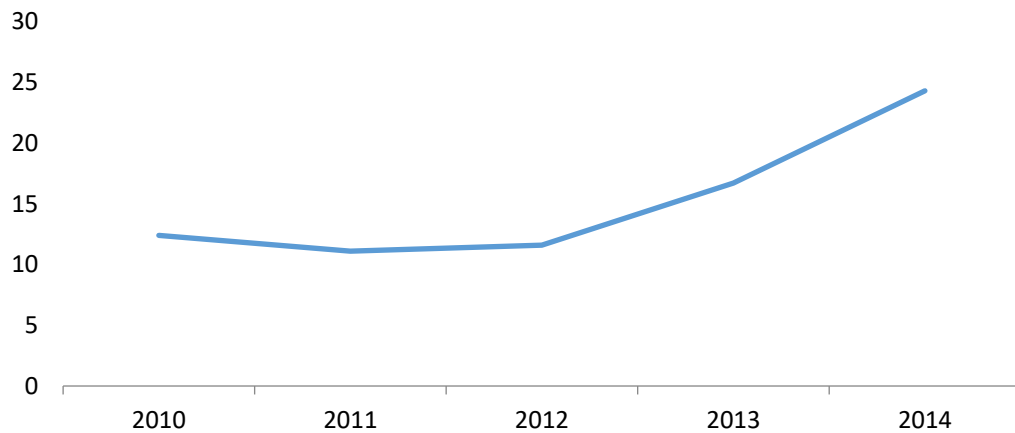
The graphs below show rates of syphilis cases between 2010 and 2014. The number of syphilis cases had been relatively equal throughout the national, state, and local level until 2014 when Maricopa County's number almost doubled from the previous year. Within Maricopa County, the number of syphilis cases exceed the state of Arizona's followed by national rates. Within Maricopa County, the prevalence of syphilis cases continues to increase throughout time. Cases are higher in males and those in the age group 20-24.



(Arizona Health Matters, n.d.), (Arizona Department of Health Services, n.d.)

Table: Prevalence Rate per 100,000 of Syphilis, 2011-2014				
	2011	2012	2013	2014
U.S.	4.5	5.0	5.5	6.3
Arizona	4.3	3.1	4.4	8.5
Maricopa County	5.4	4.1	5.3	10.0

**The prevalence rate of Syphilis (all) in Maricopa County is increasing.**

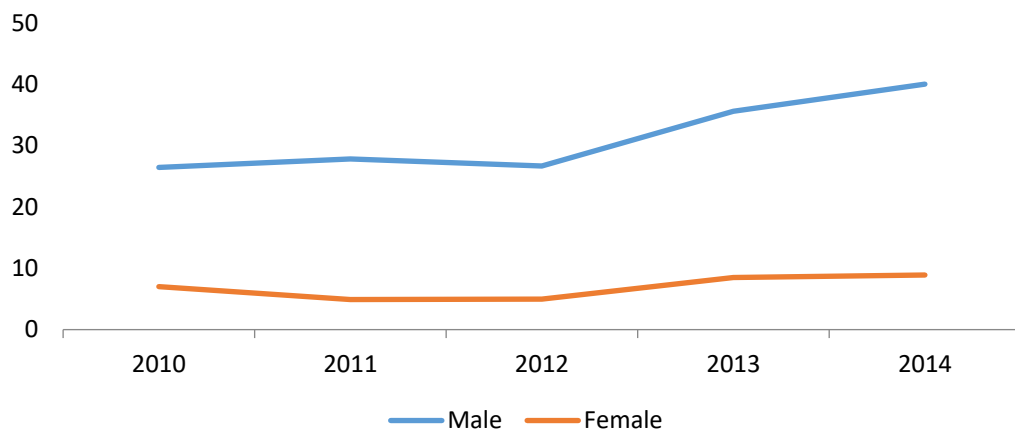


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

**Table: Prevalence Rate per 100,000 of Syphilis (All), Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Prevalence	12.4	11.1	11.6	16.7	24.3

**The prevalence rate for Syphilis (all) in Maricopa County is higher among males.**

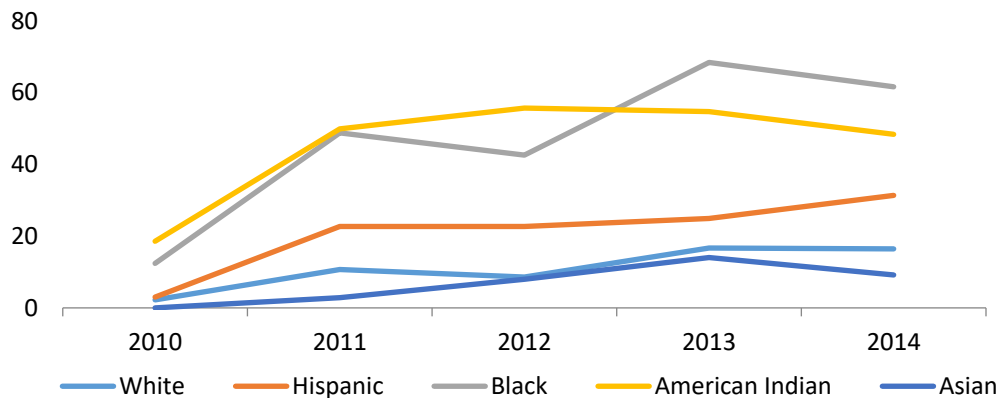


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

**Table: Prevalence Rate per 100,000 for Syphilis (All) by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	26.4	27.8	26.7	35.6	40.0
Female	7.0	4.9	5.0	8.5	8.9

**The prevalence rate of Syphilis (all) in Maricopa County is highest among the American Indian and black populations.**

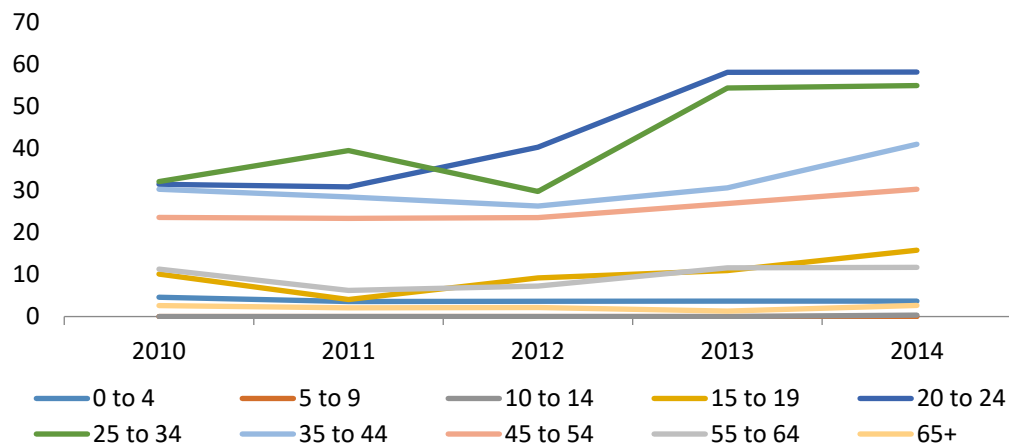


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

**Table: Prevalence Rate per 100,000 of Syphilis (All) by Race, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
White	2.2	10.7	8.6	16.7	16.4
Hispanic	3.0	22.7	22.7	24.9	31.3
Black	12.4	48.7	42.6	68.4	61.6
American Indian	18.6	49.9	55.7	54.7	48.4
Asian	0.0	2.8	8.0	14.0	9.2

**The prevalence rate of Syphilis (all) in Maricopa County is highest among the age groups 20-34.**



(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

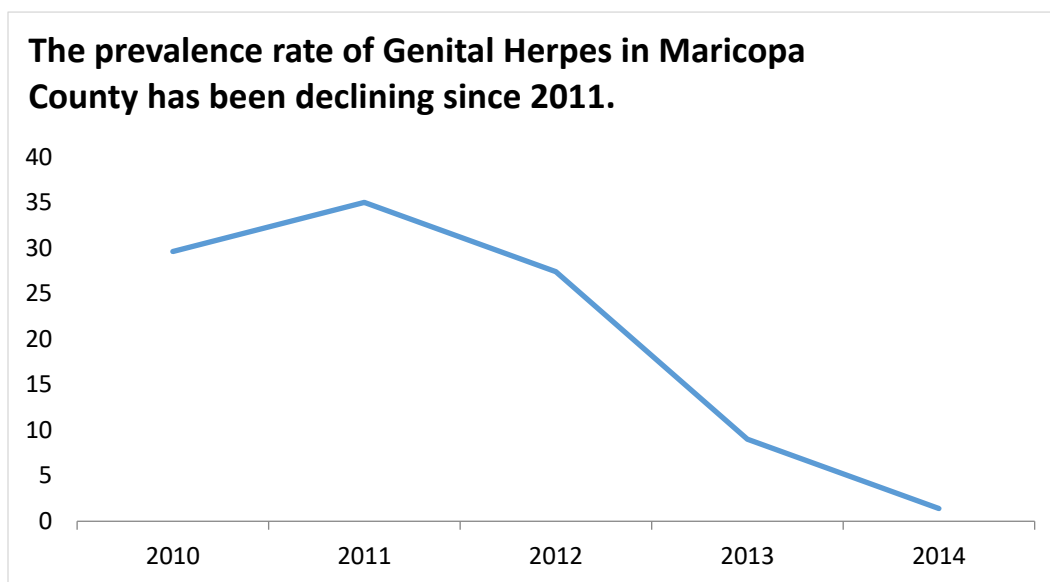
**Table: Prevalence Rate per 100,000 of Syphilis (All) by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0-4	4.6	3.6	3.6	3.7	3.7
5-9	0.0	0.0	0.0	0.0	0.0
10-14	0.0	0.0	0.0	0.0	0.3
15-19	10.1	4.1	9.2	11.0	15.8
20-24	31.5	30.9	40.3	58.2	58.2
25-34	32.2	39.5	29.8	54.4	55.0
35-44	30.3	28.5	26.3	30.7	41.0
45-54	23.6	23.4	23.6	26.9	30.3
55-64	11.3	6.2	7.3	11.6	11.7
65+	2.6	2.1	2.1	1.3	2.7

## Genital Herpes

Genital Herpes is a Sexually Transmitted Disease (STD) caused by herpes simplex virus 1 (HSV – 1) or type 2 (HSV – 2). According to the National Center for Health Statistics report from the Centers for Disease Control and Prevention, an estimated 776,000 people in the United States annually get new herpes infections. (Herone, 2016)

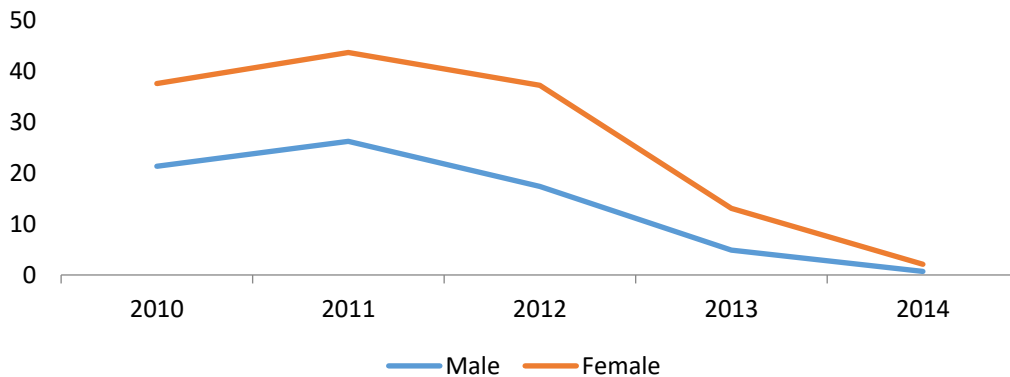
The graphs below show rates of prevalence of Genital Herpes in Maricopa County between 2010 and 2014. Genital Herpes cases have been on a steady decline after reaching a peak of documented cases in 2011. Cases are higher in females and in the age group 20-24.



(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

Table: Prevalence Rate per 100,000 of Genital Herpes, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
Prevalence	29.6	35.0	27.4	9.0	1.4

**The prevalence rate of Genital Herpes in Maricopa County is higher among females than males but in 2014 the gap almost closed.**

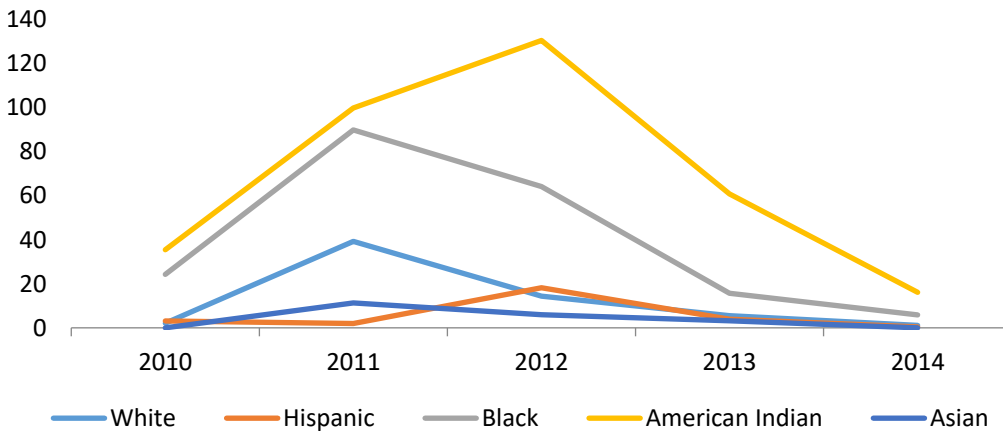


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

**Table: Prevalence Rate per 100,000 for Genital Herpes by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	21.3	26.2	17.4	4.9	0.7
Female	37.6	43.7	37.2	13.1	2.1

**The prevalence rate of Genital Herpes in Maricopa County is highest among American Indians.**

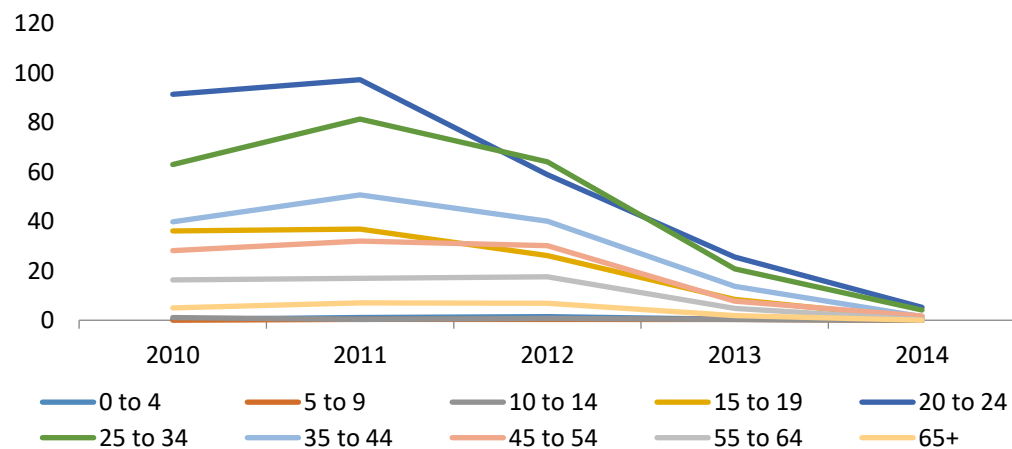


(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

Table: Prevalence Rate per 100,000 of Genital Herpes by Race, Maricopa County, 2010-2014

	2010	2011	2012	2013	2014
White	2.1	39.2	14.4	5.5	1.1
Hispanic	3.1	2.0	18.2	3.9	0.4
Black	24.2	89.8	64.1	15.7	5.9
American Indian	35.4	99.8	130.4	60.8	16.1
Asian	0.0	11.3	6.0	3.2	0.0

**The prevalence rate of Genital Herpes in Maricopa County is highest among the 20-34 years of age.**



(Maricopa County Department of Public Health, Clinical Services, STD/HIV Services, n.d.)

Table: Prevalence Rate per 100,000 of Genital Herpes by Age Group, Maricopa County, 2010-2014

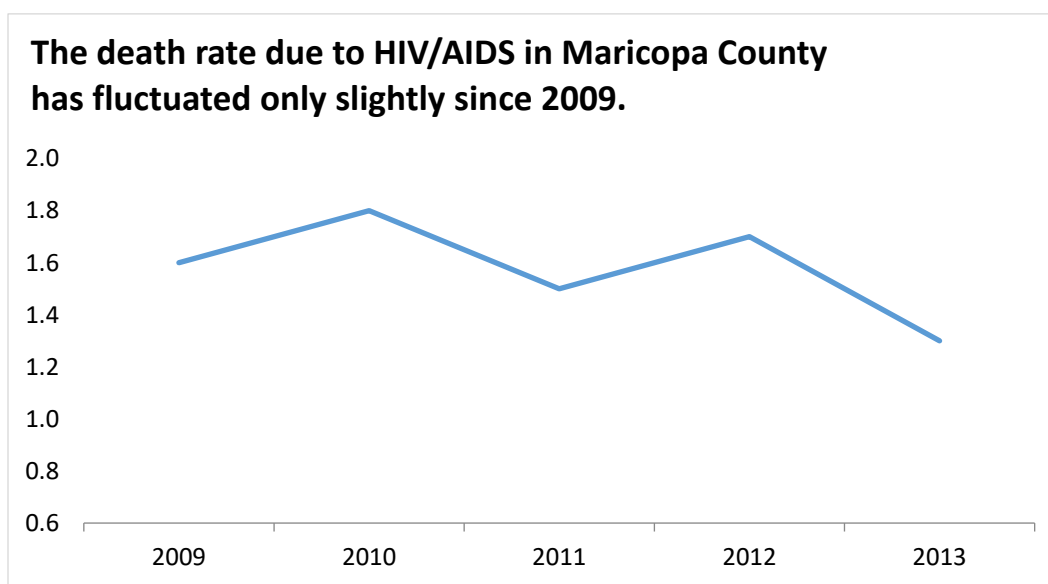
	2010	2011	2012	2013	2014
0-4	0.4	1.1	1.5	0.4	0.0
5-9	0.0	0.4	0.3	0.3	0.0
10-14	1.1	0.4	0.7	0.3	0.0
15-19	36.1	36.9	26.2	8.4	0.7
20-24	91.4	97.3	58.9	25.6	5.2
25-34	63.0	81.4	64.1	20.8	4.1
35-44	39.8	50.7	40.0	13.8	1.5
45-54	28.2	32.0	30.2	7.7	1.7
55-64	16.3	17.0	17.6	4.8	0.2
65+	5.0	7.0	6.8	1.9	0.0

## HIV and AIDS

According to the National Center for Health Statistics report from the Centers for Disease Control and Prevention, in 2014, 44,073 cases were diagnosed with HIV. The graphs below show rates of HIV and AIDS at the national, state, and local level (between 2009 and 2014). In 2014, HIV and AIDS deaths accounted for 6,721 of lives in the United States. However, the number of HIV and AIDS cases in Arizona significantly falls below the national rate. (Herone, 2016)

When it comes to HIV the prevalence of cases have been increasing relatively steady and slowly throughout the years. The trend of HIV cases continues to be higher in males, African Americans and those between the ages 20-24.

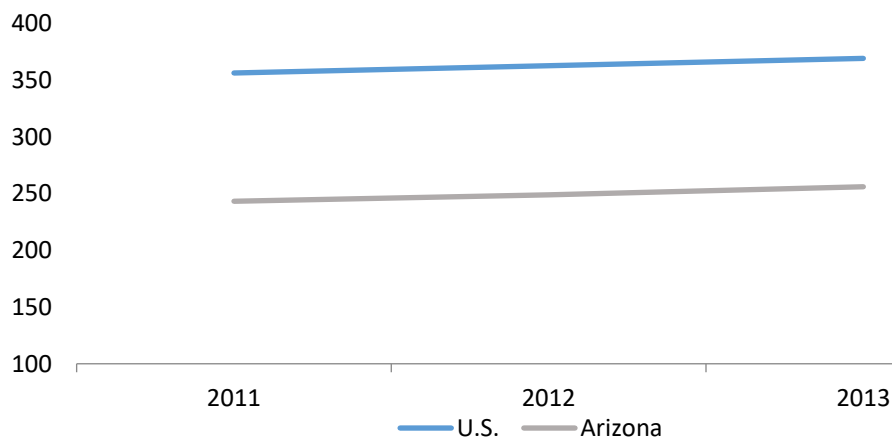
When it comes to AIDS, the prevalence cases are dramatically decreasing throughout the years. The trend of AIDS cases continues to be higher in males and African Americans and those within the age group of 25-34.



(Arizona Department of Health Services, n.d.)

Table: Death Rate per 100,000 Due to HIV/AIDS, Maricopa County, 2009-2013					
	2009	2010	2011	2012	2013
Maricopa	1.6	1.8	1.51	1.7	1.3

**The rate of persons living with diagnosed HIV in Arizona is lower than U.S. rate.**

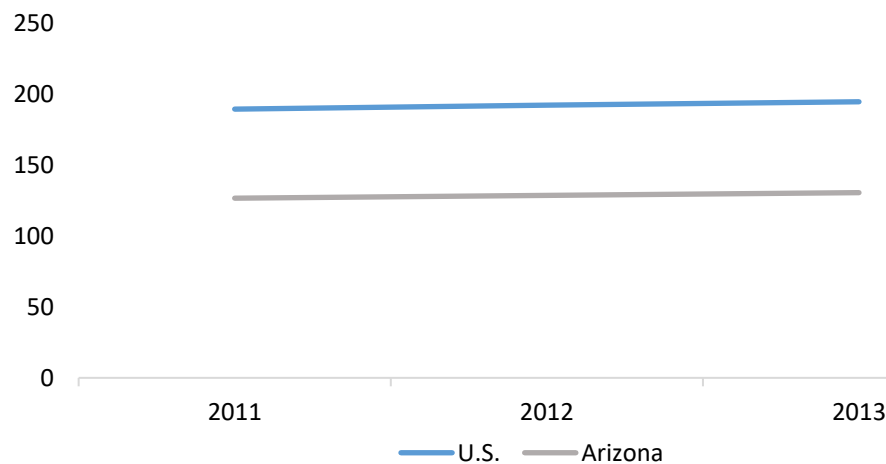


(Centers for Disease Control and Prevention, n.d.)

**Table: Rate per 100,000 of Persons Living with Diagnosed HIV, 2011-2013**

	2011	2012	2013
U.S.	356.4	362.8	369.3
Arizona	243.6	249.6	255.7

**The rate of persons living with diagnosed AIDS in Arizona is lower than the U.S. rate.**

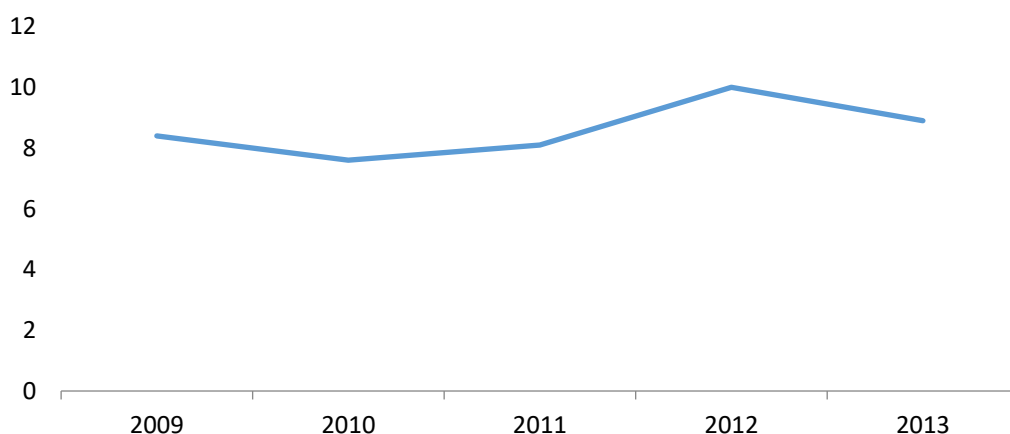


(Centers for Disease Control and Prevention, n.d.)

**Table: Rate per 100,000 of Persons Living with Diagnosed AIDS, 2011-2013**

	2011	2012	2013
U.S.	189.5	192.3	194.7
Arizona	126.7	128.7	130.6

**The prevalence rate of HIV in Maricopa County hasn't changed significantly since 2009.**

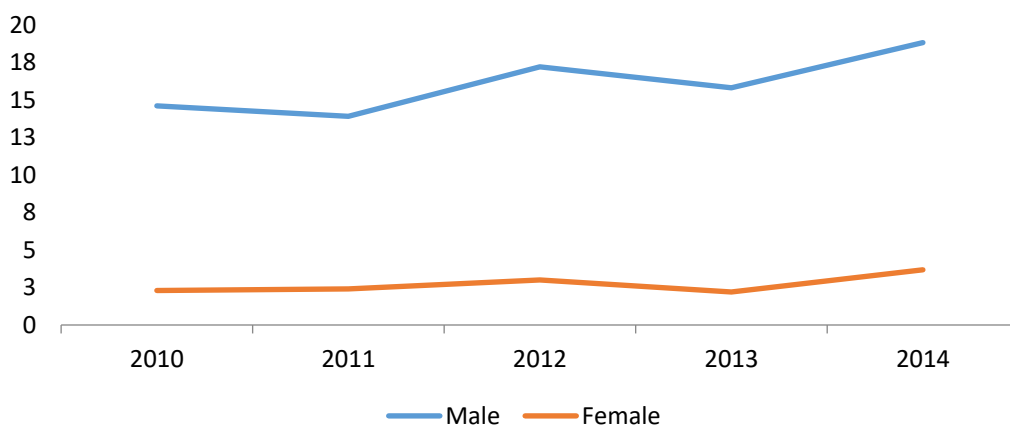


(Arizona Department of Health Services, n.d.)

**Table: Prevalence Rate per 100,000 of HIV, Maricopa County, 2009-2013**

	2009	2010	2011	2012	2013
Maricopa	8.4	7.6	8.1	10.0	8.9

**The prevalence rate of HIV in Maricopa County is much higher among males than females.**

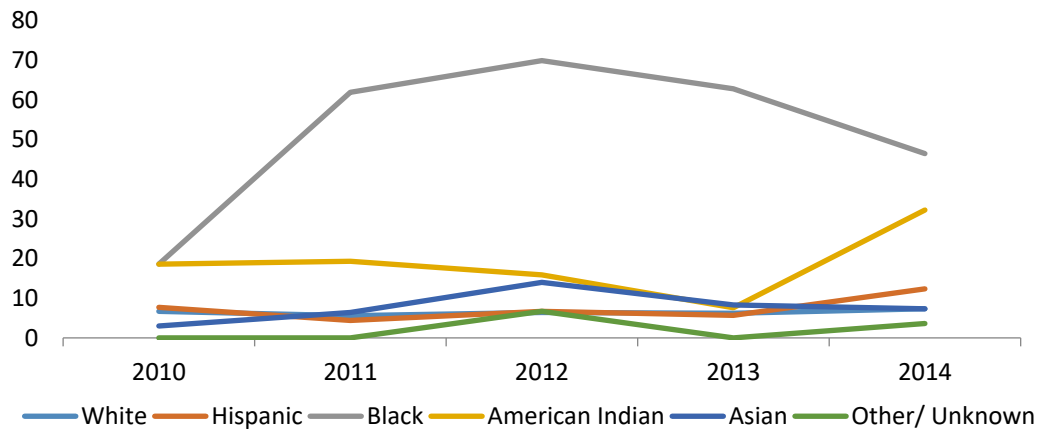


(Arizona Department of Health Services, n.d.)

**Table: Prevalence Rate per 100,000 of HIV by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	14.6	13.9	17.2	15.8	18.8
Female	2.3	2.4	3.0	2.2	3.7

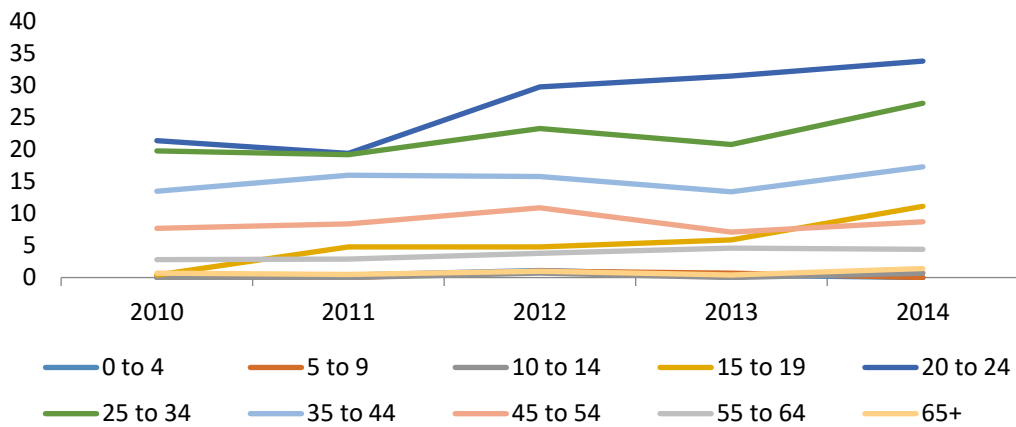
**The prevalence rate of HIV in Maricopa County is highest among the Black population.**



(Arizona Department of Health Services, n.d.)

Table: Prevalence Rate per 100,000 of HIV by Race, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
White	6.7	5.6	6.4	6.2	7.3
Hispanic	7.7	4.4	6.7	5.7	12.4
Black	18.6	61.9	69.9	62.8	45.4
American Indian	18.6	19.3	15.9	7.6	32.2
Asian	3.0	6.4	14.0	8.3	7.3
Other/unknown	0.0	0.0	6.7	0.0	3.6

**The prevalence rate of HIV in Maricopa County is highest among those 20-34 years of age.**

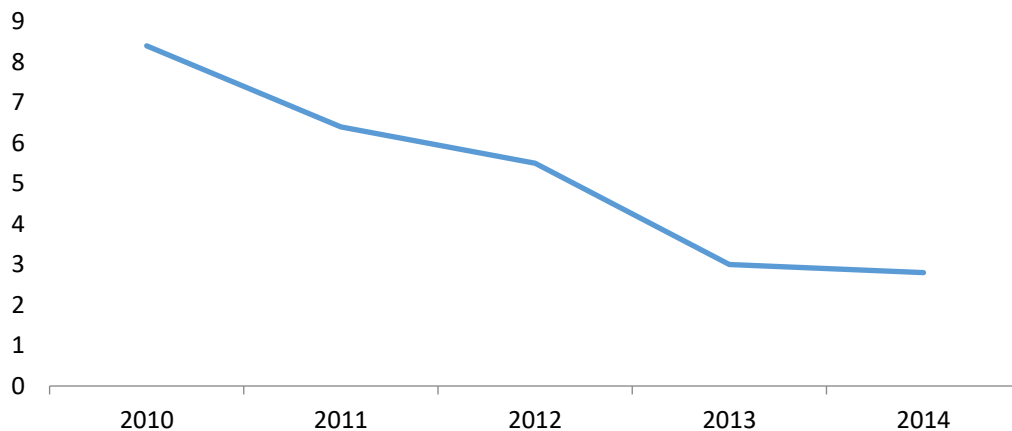


(Arizona Department of Health Services, n.d.)

**Table: Prevalence Rate per 100,000 of HIV by Age Group, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
0-4	0.0	0.4	1.1	0.4	0.0
5-9	0.4	0.0	1.0	0.7	0.0
10-14	0.0	0.0	0.7	0.0	0.7
15-19	0.4	4.8	4.8	5.9	11.1
20-24	21.4	19.4	29.8	31.5	33.8
25-34	19.8	19.2	23.3	20.8	27.2
35-44	13.5	16.0	15.8	13.4	17.3
45-54	7.7	8.4	10.9	7.1	8.7
55-64	2.8	2.9	3.8	4.6	4.4
65+	0.7	0.5	1.0	0.4	1.4

**The prevalence rate of AIDS in Maricopa County has been declining since 2010.**

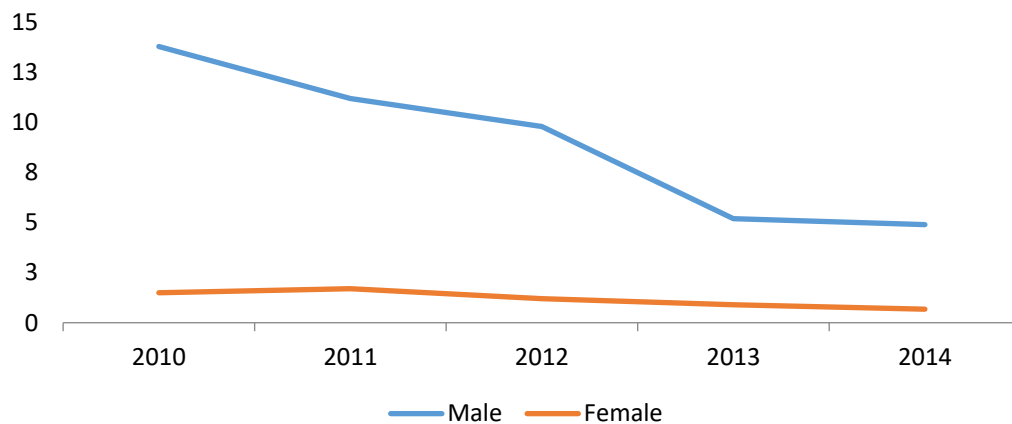


(Arizona Department of Health Services, n.d.)

**Table: Prevalence Rate per 100,000 of AIDS, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Prevalence	8.4	6.4	5.5	3.0	2.8

**The prevalence rate of AIDS in Maricopa County is higher among males than females.**

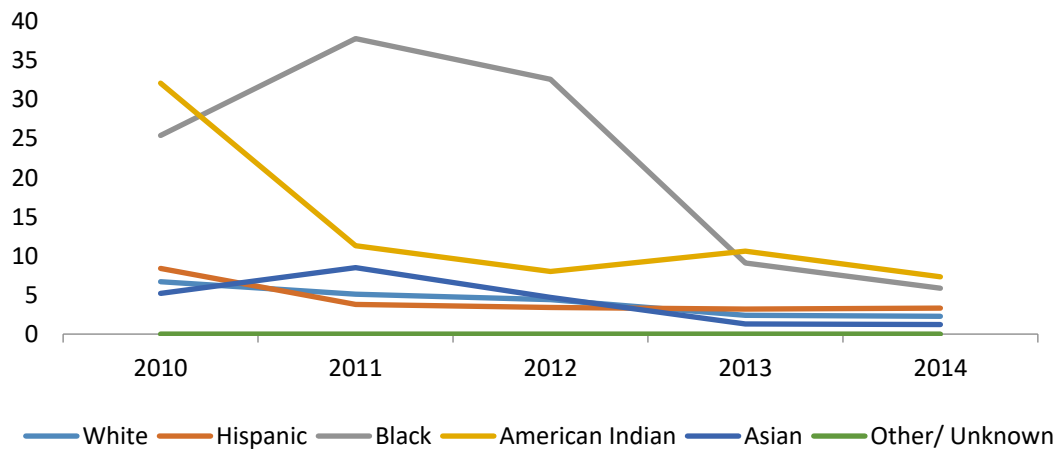


(Arizona Department of Health Services, n.d.)

**Table: Prevalence Rate per 100,000 of AIDS by Gender, Maricopa County, 2010-2014**

	2010	2011	2012	2013	2014
Male	13.8	11.2	9.8	5.2	4.9
Female	1.5	1.7	1.2	0.9	0.7

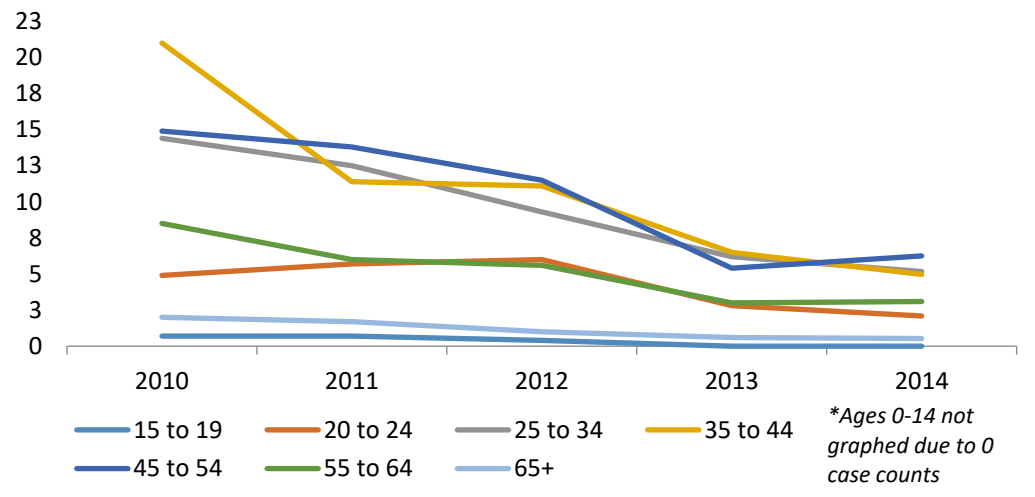
**The prevalence rate of AIDS in Maricopa County is highest among the Black and American Indian populations.**



(Arizona Department of Health Services, n.d.)

Table: Prevalence Rate per 100,000 of AIDS by Race, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
White	6.7	5.1	4.4	2.4	2.3
Hispanic	8.4	3.8	3.4	3.2	3.3
Black	25.4	37.8	32.6	9.1	5.9
American Indian	32.1	11.3	8.0	10.6	7.3
Asian	5.2	8.5	4.7	1.3	1.2
Other/unknown	0.0	0.0	0.0	0.0	0.0

**The prevalence rate of AIDS in Maricopa County is highest among those 25-54 years of age.**



(Arizona Department of Health Services, n.d.)

**Table: Prevalence Rate per 100,000 of AIDS by Age Group, Maricopa County, 2010-2014**

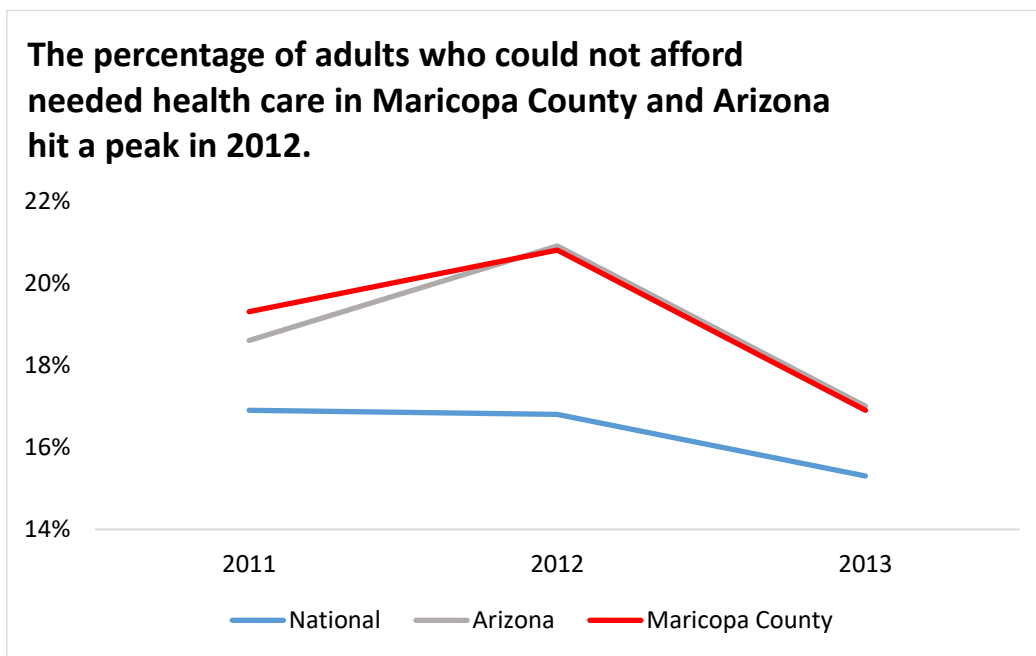
	2010	2011	2012	2013	2014
0-14	0.0	0.0	0.0	0.0	0.0
15-19	0.7	0.7	0.4	0.0	0.0
20-24	4.9	5.7	6.0	2.8	2.1
25-34	14.4	12.5	9.3	6.2	5.2
35-44	21.0	11.4	11.1	6.5	5.0
45-54	14.9	13.8	11.5	5.4	6.3
55-64	8.5	6.0	5.6	3.0	3.1
65+	2.0	1.7	1.0	0.6	0.5

## Health Care: Access and Quality

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. (*Arizona Health Matters, 2017*)

Having a usual source of health care allows individuals to be proactive about their healthcare such as receiving regular screenings and diagnostic checkups, and preventative healthcare. Disparities to access healthcare can affect individuals and society, and limited access to healthcare impacts the individual's ability to reach their full potential, negatively affecting quality of life. (*Arizona Health Matters, 2017*)

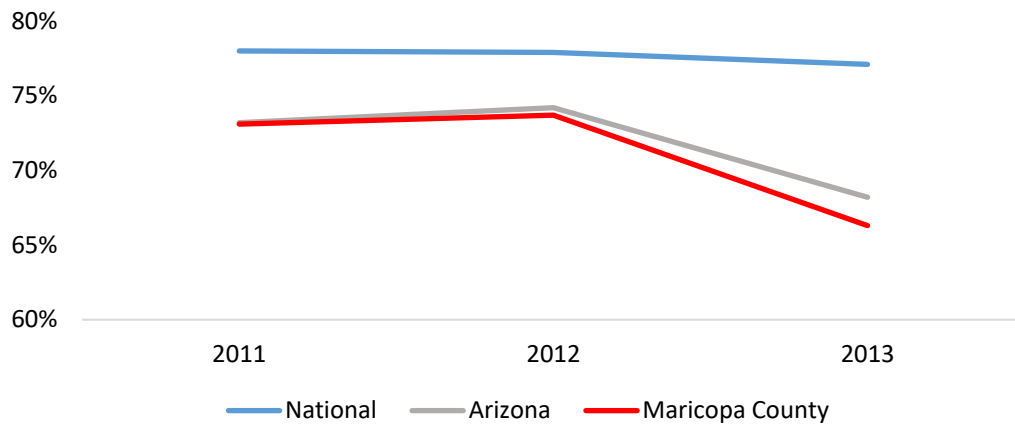
Medical costs are extremely high, making it difficult for people without health insurance to afford medical treatment or prescription drugs. High costs to medical access will likely also discourage the individual to get routine checkups and screenings, and if they do become ill, they will not seek further treatment until the condition is more advanced, difficult and more costly to treat. Today, many small businesses are not able to offer health coverage to their employees due to high health insurance premiums. (*Arizona Health Matters, 2017*)



(Bass, Blackwell, & Hussaini, 2011 Arizona Behavioral Risk Factor Surveillance Survey, 2011), (Blackwell, Bass, Bishop, & Hussaini, 2012), (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Arizona Department of Health Services, n.d.)

Table: Percent of Adults Who Could Not Afford Needed Healthcare, 2011-2013			
	2011	2012	2013
National	16.9%	16.8%	15.3%
Arizona	18.6%	20.9%	17.0%
Maricopa County	19.3%	20.8%	16.9%

**The percentage of adults in Maricopa County who have a usual source of health care decreased in 2013 to about 66%.**

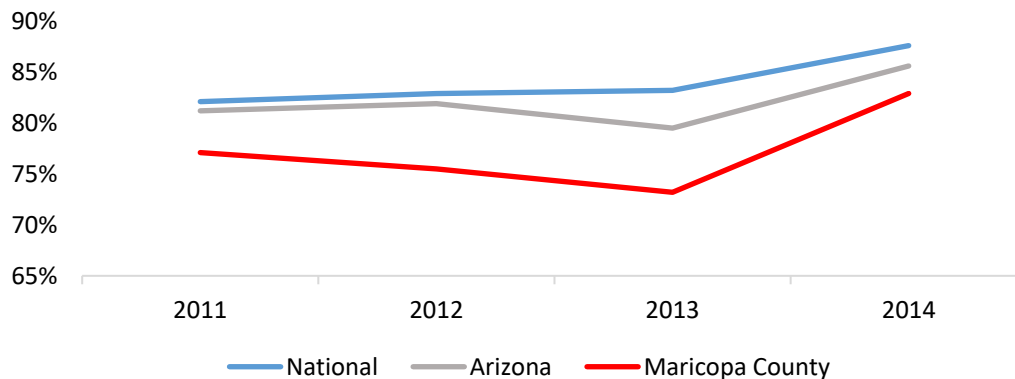


(Bass, Blackwell, & Hussaini, 2011 Arizona Behavioral Risk Factor Surveillance Survey, 2011), (Blackwell, Bass, Bishop, & Hussaini, 2012), (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Arizona Department of Health Services, n.d.)

**Table: Percent of Adults with a Usual Source of Health Care, 2011-2013**

	2011	2012	2013
National	78.0%	77.9%	77.1%
Arizona	73.2%	74.2%	68.2%
Maricopa County	73.1%	73.7%	66.3%

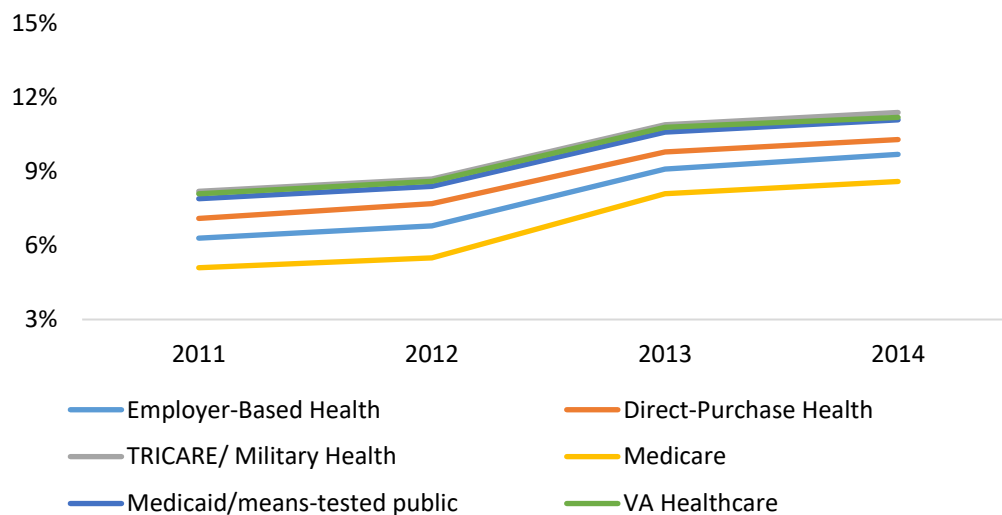
**The percentage of adults in Maricopa County with healthcare coverage is below the National percent but increased in 2014.**



(Blackwell, Bass, Bishop, & Hussaini, 2012) (Arizona Department of Health Services, n.d.) (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013) (Bass, Blackwell, & Hussaini, 2011 Arizona Behavioral Risk Factor Surveillance Survey, 2011) (Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014)

Table: Percentage of Adults with Healthcare Coverage, 2011-2014				
	2011	2012	2013	2014
National	82.1%	82.9%	83.2%	87.6%
Arizona	81.2%	81.9%	79.5%	85.6%
Maricopa County	77.1%	75.5%	73.2%	82.9%

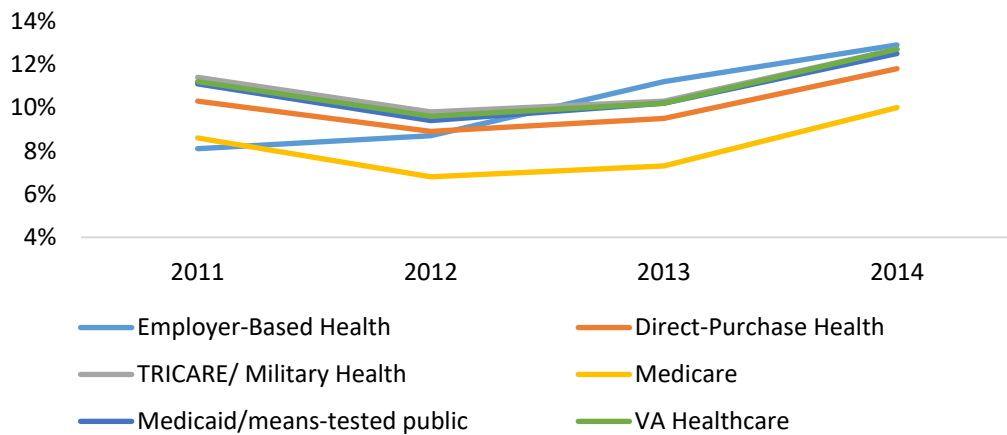
**The most common type of health coverage in the U.S. is TRICARE\Military Health and VA Healthcare.**



(United States Census Bureau, n.d.)

Table: Type of Health Coverage in the U.S., 2011-2014				
	2011	2012	2013	2014
Employer-Based Health	6.3%	6.8%	9.1%	9.7%
Direct-Purchase Health	7.1%	7.7%	9.8%	10.3%
TRICARE/ Military Health	8.2%	8.7%	10.9%	11.4%
Medicare	5.1%	5.5%	8.1%	8.6%
Medicaid/means-tested public	7.9%	8.4%	10.6%	11.1%
VA Healthcare	8.1%	8.6%	10.8%	11.2%

**In 2013, the most common type of health coverage in Arizona switched from TRICARE/Military Health and VA Healthcare to Medicaid.**

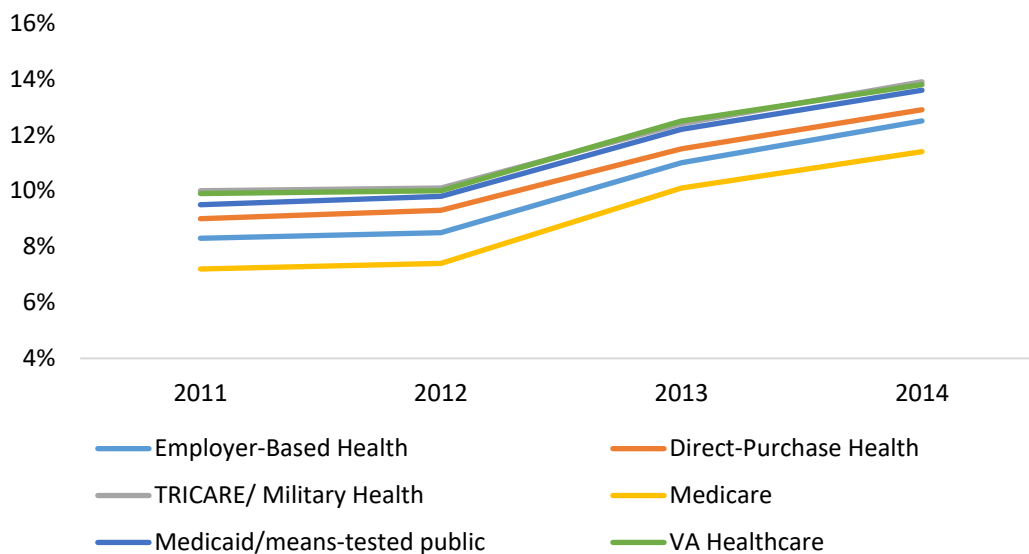


(United States Census Bureau, n.d.)

**Table: Type of Healthcare Coverage in Arizona, 2011-2014**

	2011	2012	2013	2014
Employer-Based Health	8.1%	8.7%	11.2%	12.9%
Direct-Purchase Health	10.3%	8.9%	9.5%	11.8%
TRICARE/ Military Health	11.4%	9.8%	10.3%	12.7%
Medicare	8.6%	6.8%	7.3%	10.0%
Medicaid/means-tested public	11.1%	9.4%	10.2%	12.5%
VA Healthcare	11.2%	9.6%	10.2%	12.7%

**The most common type of health coverage in Maricopa County is TRICARE\Military Health and VA Healthcare.**

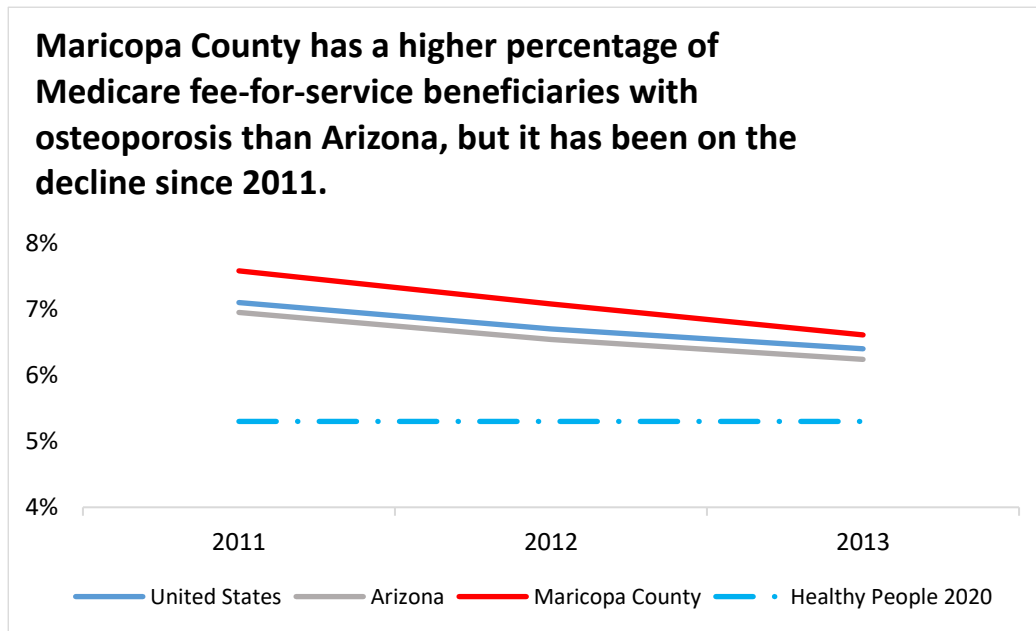


(United States Census Bureau, n.d.)

Table: Type of Healthcare Coverage in Maricopa County, 2011-2014				
	2011	2012	2013	2014
Employer-Based Health	8.3%	8.5%	11.0%	12.5%
Direct-Purchase Health	9.0%	9.3%	11.5%	12.9%
TRICARE/ Military Health	10.0%	10.1%	12.4%	13.9%
Medicare	7.2%	7.4%	10.1%	11.4%
Medicaid/means-tested public	9.5%	9.8%	12.2%	13.6%
VA Healthcare	9.9%	10.0%	12.5%	13.8%

## Medicare Beneficiaries

Osteoporosis is a disease that causes bones to become fragile and likely to break due to a fall or, in serious cases, when sneezing. There is no cure for osteoporosis, thus living a healthy lifestyle such as a healthy diet, exercising, and certain medications can prevent bone loss and risk of bone fractures. This disease affects more than 40 million Americans and contributes to an estimated 2 million bone fractures per year. According to the National Osteoporosis Foundation, fractures due to osteoporosis is projected to increase by 3 million by year 2025 and will cost \$25.3 billion annually. (*Arizona Health Matters, 2017*)



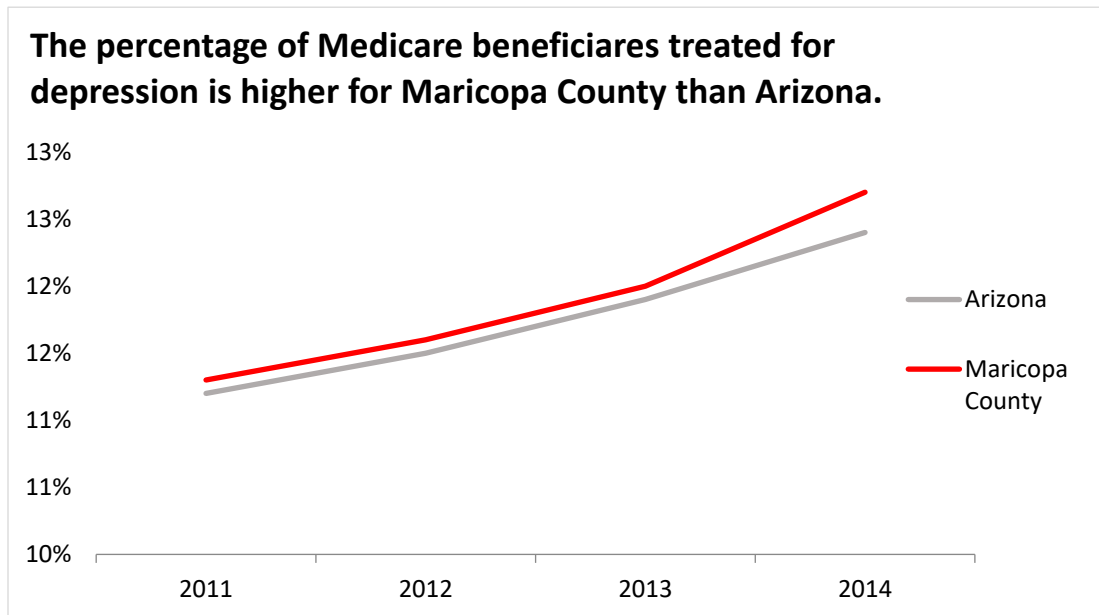
(Chronic Conditions Data Warehouse, 2016), (Arizona Health Matters, n.d.), (Office of Disease Prevention and Health Promotion, 2017)

Table: Percent of Medicare Fee-for-Service Beneficiaries with Osteoporosis, 2011-2014				
	2011	2012	2013	
United States	7.1%	6.7%	6.4%	
Arizona	7.0%	6.5%	6.3%	
Maricopa County	7.6%	7.1%	6.6%	
Healthy People 2020	5.3%	5.3%	5.3%	

## Depression

Depression is a chronic disease that negatively affects a person's feelings, behaviors, and thought processes. Many people with depression never seek treatment and those with severe depression can improve their depression with treatments such as medicine and psychotherapies.

According to the National Co-Morbidity Survey of mental health disorders, people over the age of 60 have lower rates of depression, 10.7%, than the general population compared at 16.9% overall. The Center for Medicare Services estimated that depression occurs in 25% of those with other illnesses including arthritis, cancer, cardiovascular disease, chronic lung disease, and stroke. (*Arizona Health Matters, 2017*)

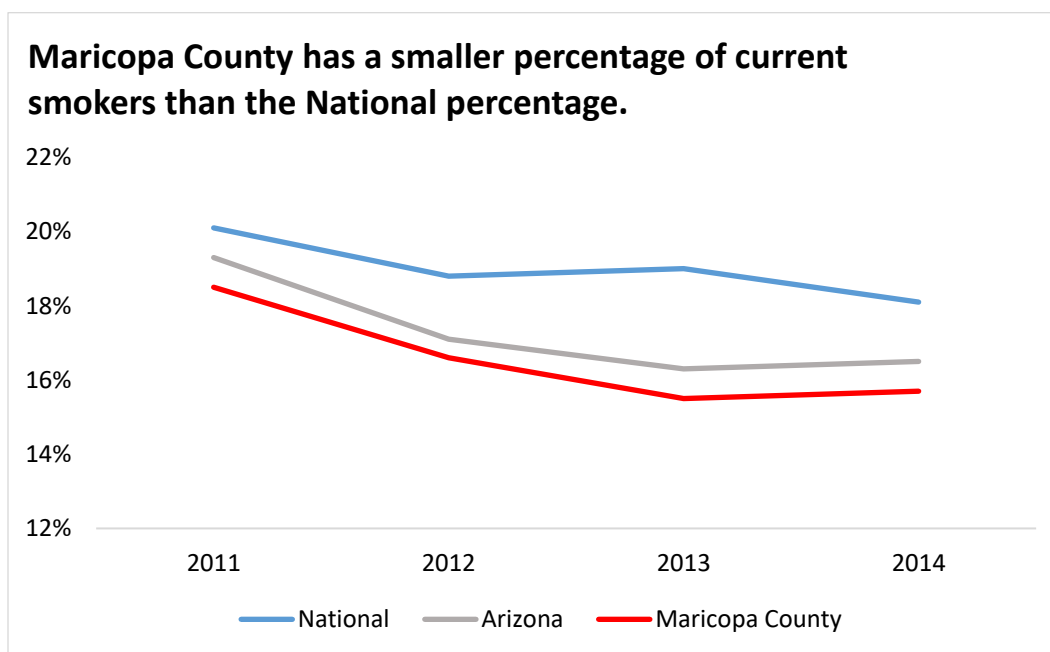


(Arizona Health Matters, n.d.)

Table: Percent of Medicare Beneficiaries Who Were Treated for Depression, 2011-2014				
	2011	2012	2013	2014
Arizona	11.2%	11.5%	11.9%	12.4%
Maricopa County	11.3%	11.6%	12.0%	12.7%

## Health Behaviors

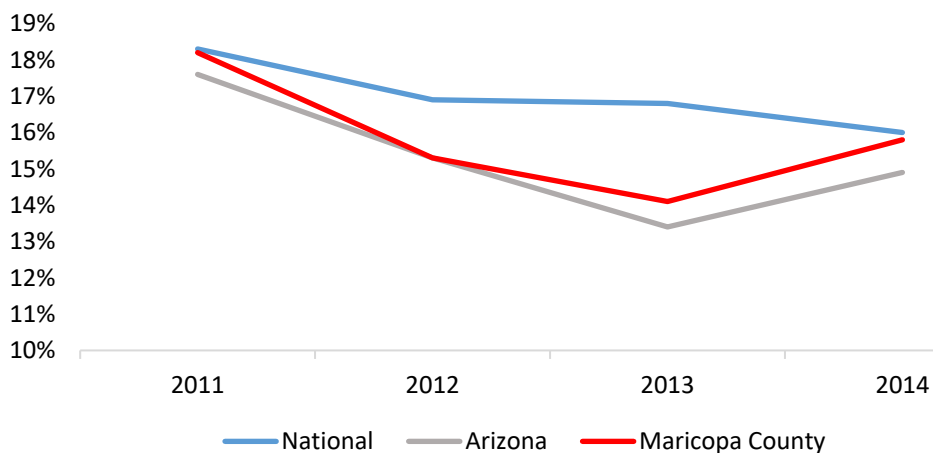
Health behaviors are a factor that is associated with the social determinants of health, which in turn contributes to a person's current state of health or health outcome. Social situations such as a person's level of education, access to food, security, social economic status, discrimination, and social support – to name a very few – are likely to influence individual behaviors and contribute to social patterning of health, diseases, and illnesses. Addressing social determinants of health is the primary approach to achieving health equity. (*Centers for Disease Control and Prevention, 2014*)



(Bass, Blackwell, & Hussaini, 2011 Arizona Behavioral Risk Factor Surveillance Survey, 2011), (Blackwell, Bass, Bishop, & Hussaini, 2012), (Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014), (Arizona Department of Health Services, n.d.)

Table: Percentage of Adults who are Current Smokers, 2011-2014				
	2011	2012	2013	2014
National	20.1%	18.8%	19.0%	18.1%
Arizona	19.3%	17.1%	16.3%	16.5%
Maricopa County	18.5%	16.6%	15.5%	15.7%

**Maricopa County has a smaller percentage of adults who are binge drinkers than the nation.**

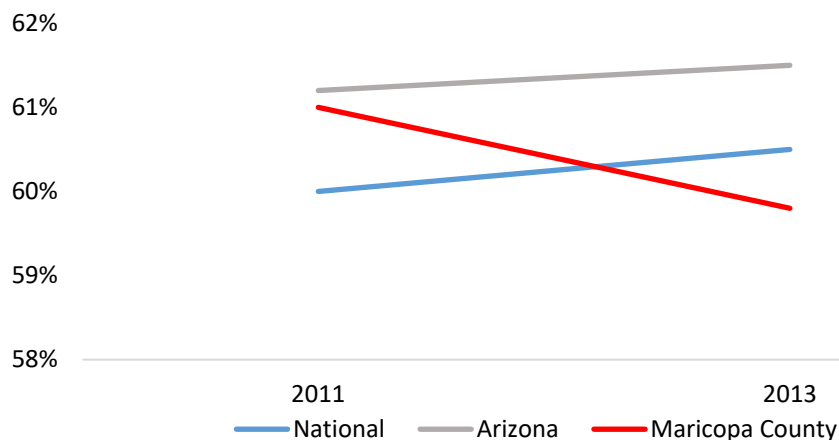


(Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014), (Arizona Department of Health Services, n.d.)

**Table: Percentage of Adults who are Binge Drinkers, 2011-2014**

	2011	2012	2013	2014
National	18.3%	16.9%	16.8%	16.0%
Arizona	17.6%	15.3%	13.4%	14.9%
Maricopa County	18.2%	15.3%	14.1%	15.8%

**Arizona has a higher percentage of adults who meet the exercise guidelines than Maricopa County.**

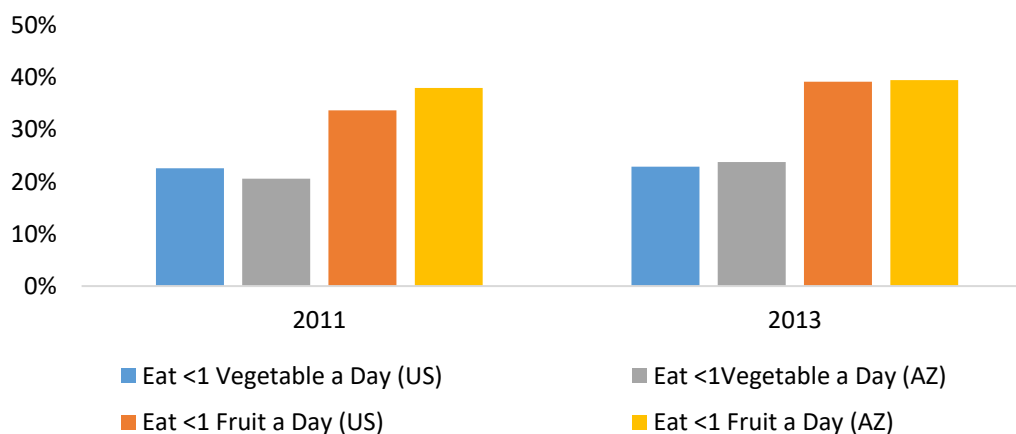


(Bass, Bailey, & Gieszl, 2013 Arizona Behavioral Risk Factor Surveillance System Survey, 2013), (Bass, Blackwell, & Hussaini, 2011 Arizona Behavioral Risk Factor Surveillance Survey, 2011), (Arizona Department of Health Services, n.d.)

**Table: Percentage of Adults Who Meet Exercise Guidelines, 2011 and 2013**

	2011	2013
National	60.0%	60.5%
Arizona	61.2%	61.5%
Maricopa County	61.0%	59.8%

**The percentage of adults in Maricopa County who consume <1 vegetable or fruit a day is similar to the U.S. consumption percentage.**

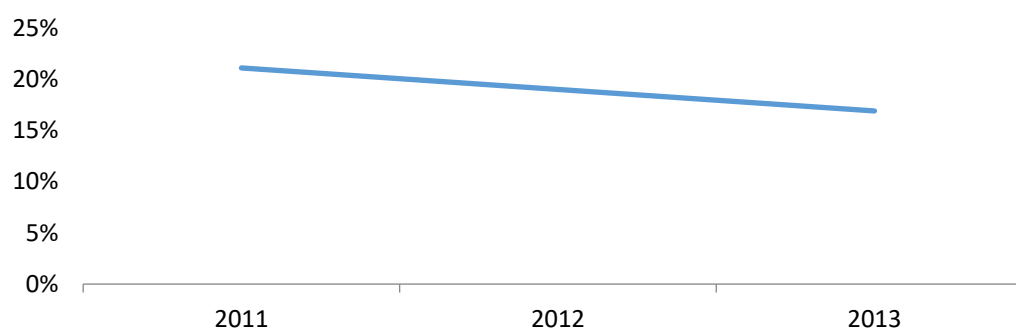


(Centers for Disease Control and Prevention, 2017)

**Table: Percentage of Adults Who Consume <1 Vegetable OR Fruit a Day (US and AZ), 2011 and 2013**

	2011	2013
Eat <1 Vegetable a Day (US)	22.6%	22.9%
Eat <1 Fruit a Day (US)	33.7%	39.2%
Eat <1 Vegetable a Day (AZ)	20.6%	23.8%
Eat <1 Fruit a Day (AZ)	38.0%	39.5%

**The percentage of adults in Maricopa County who consume 5+ vegetables AND fruits a day decreased slightly from 2011 to 2013.**

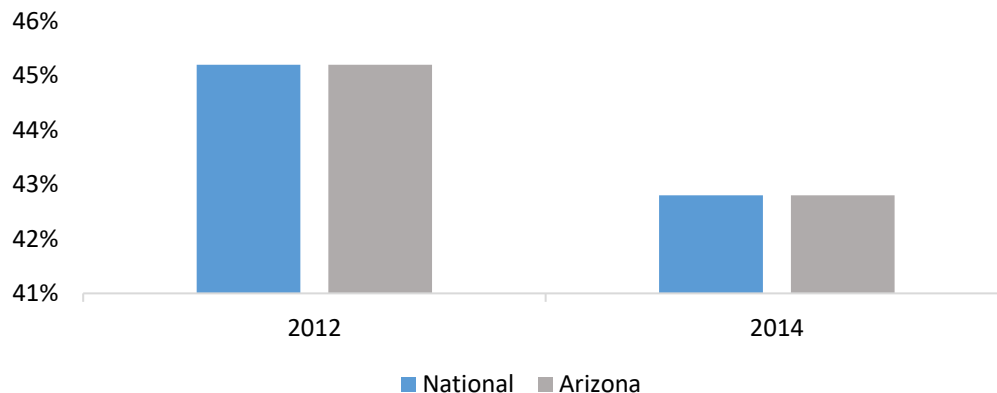


(Arizona Department of Health Services, n.d.)

**Table: Percentage of Adults Who Consume 5+ Vegetables AND Fruits a Day, Maricopa County, 2011 and 2013**

	2011	2012	2013
Maricopa County	21.1%	19.0%	16.9%

**The percentages of men in Maricopa County aged 40+ who have had a PSA test within the past two years is identical to the U.S. percentages.**

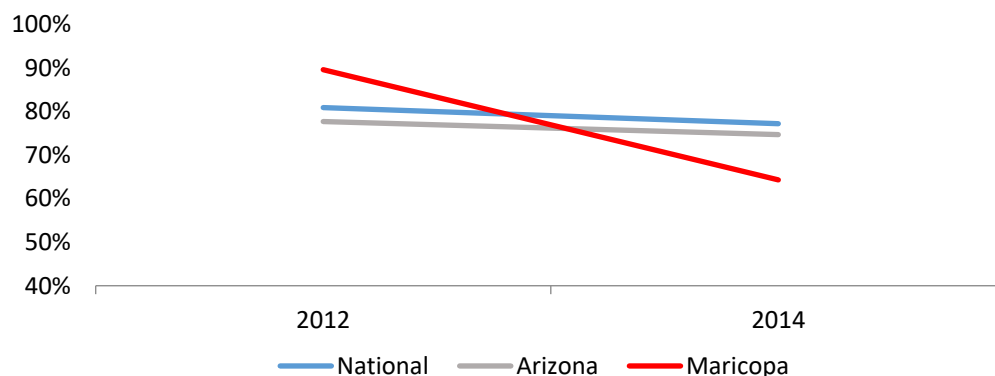


(Centers for Disease Control and Prevention, 2017)

**Table: Percent of Men Aged 40+ Who Have Had a PSA Test within the Past Two Years, 2012 and 2014**

	2012	2014
National	45.2%	42.8%
Arizona	45.2%	42.8%

**The percent of women in Maricopa County aged 50+ who have had a Mammogram within the past two years is declining.**

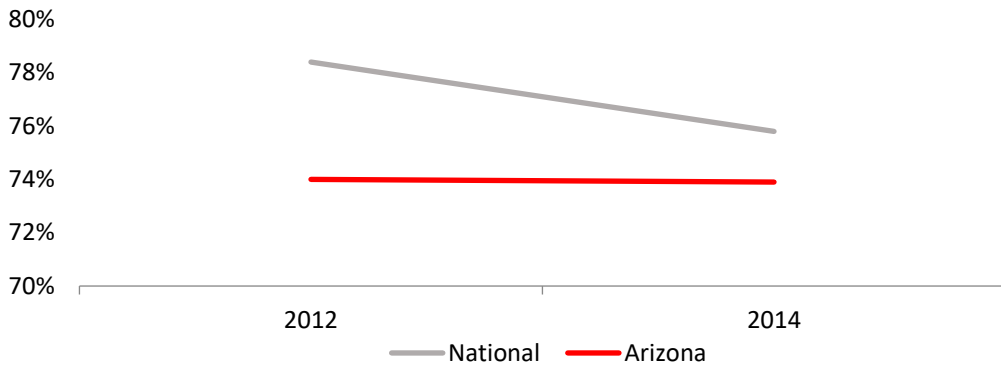


(Blackwell, Bass, Bishop, & Hussaini, 2012), (Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014), (Arizona Department of Health Services, n.d.)

**Table: Percent of Women Aged 50+ Who Have Had a Mammogram Within the Past Two Years, 2012 and 2014**

	2012	2014
National	80.9%	77.2%
Arizona	77.7%	74.7%
Maricopa County	89.6%	64.3%

**The percentage of women in Arizona aged 18+ who have had a pap test within the past three years is less than the National percentage.**

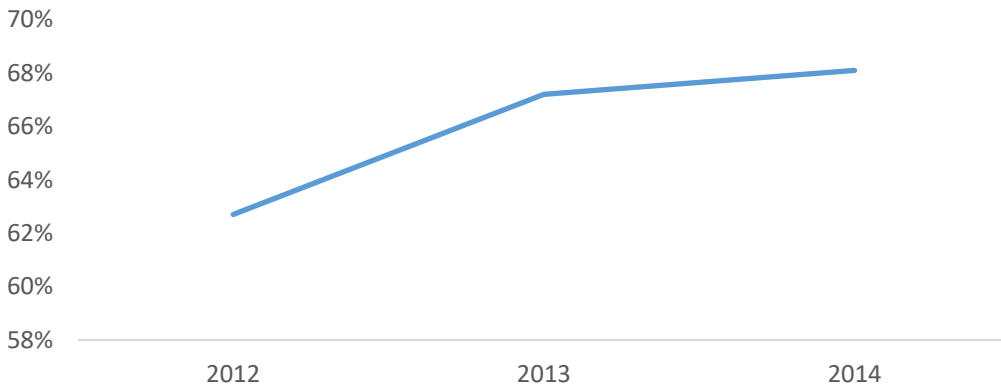


(Bass, Bailey, & Gieszl, Arizona Behavioral Risk Factor Surveillance System Survey 2014, 2014)

**Table: Percent of Women Ages 21-65 Who Have Had a Pap Test Within the Past Three Years, 2012 and 2014**

	2012	2014
National	78.4%	75.8%
Arizona	74.0%	73.9%

**The percentage of adults in Maricopa County >49 years old who received a sigmoidoscopy/ colonoscopy screening increased from 2012 to 2014.**

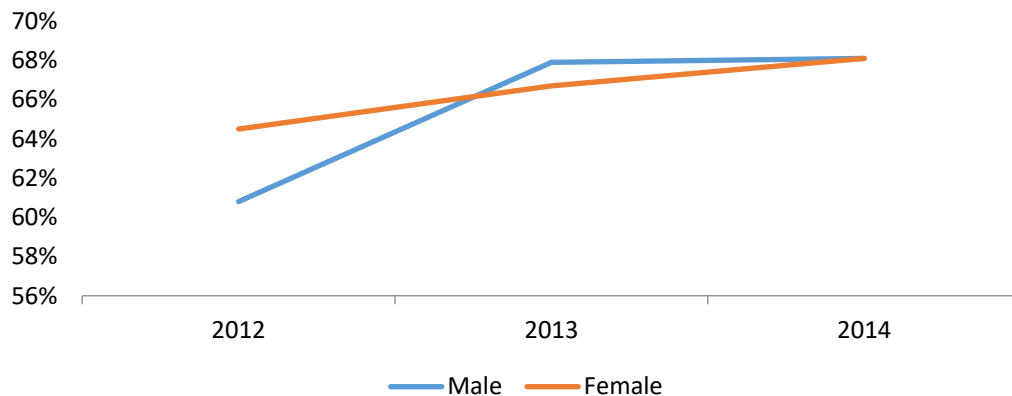


(Arizona Department of Health Services, n.d.)

**Table: Percent of Adults >49 Years Old who Received a Sigmoidoscopy/Colonoscopy Screening, Maricopa County, 2012-2014**

	2012	2013	2014
Total	62.7%	67.2%	68.1%

**In 2014, the percent of female and male adults in Maricopa County >49 years old who received a sigmoidoscopy/colonoscopy screening was the same.**

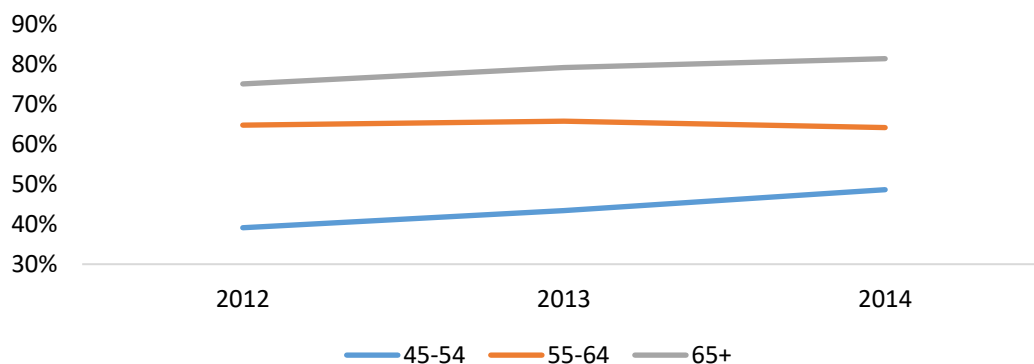


(Arizona Department of Health Services, n.d.)

**Table: Adults >49 Years Old who Received a Sigmoidoscopy/Colonoscopy Screening by Gender, Maricopa County 2012-2014**

	2012	2013	2014
Male	60.8%	67.9%	68.1%
Female	64.5%	66.7%	68.1%

**The most common adults in Maricopa County to receive a sigmoidoscopy/colonoscopy screening are those 65+ years of age.**

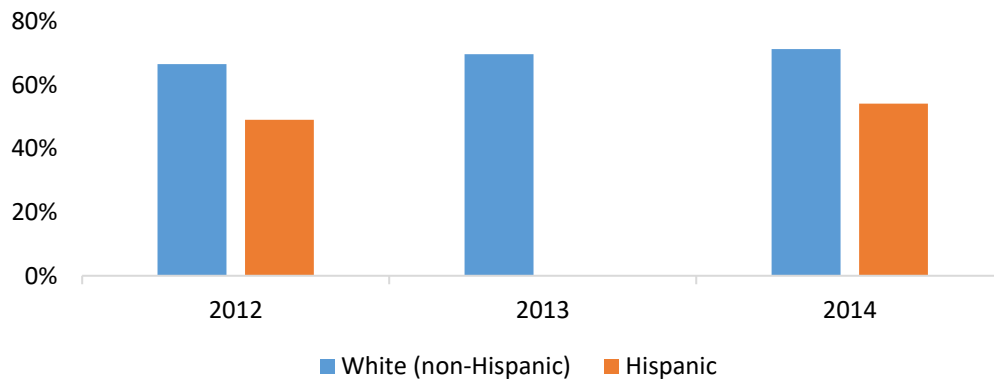


(Arizona Department of Health Services, n.d.)

**Table: Adults >49 Years Old who Received a Sigmoidoscopy/Colonoscopy Screening by Age Group, Maricopa County, 2012-2014**

	2012	2013	2014
45-54	39.1%	43.4%	48.6%
55-64	64.7%	65.7%	64.1%
65+	75.0%	79.1%	81.3%

**A higher percentage of white adults than Hispanic adults >49 years old received a sigmoidoscopy/colonoscopy screening in Maricopa County.**



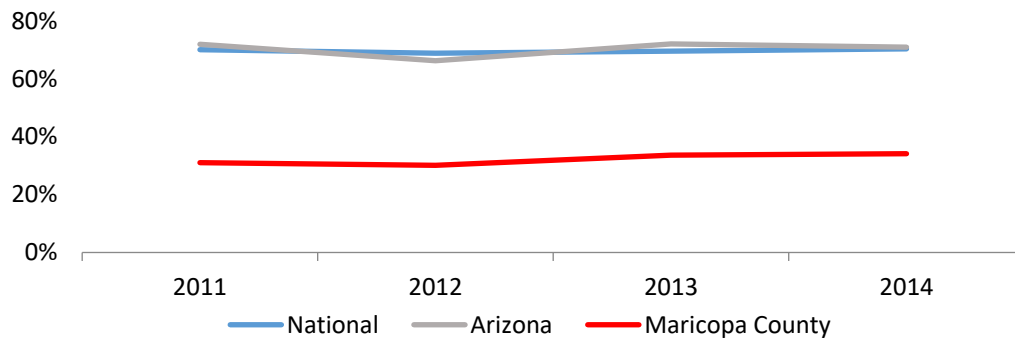
(Arizona Department of Health Services, n.d.)

Rates for Hispanic are not available for 2013 as the sample size was too small.

**Table: Percent of Adults >49 Years Old who Received a Sigmoidoscopy/Colonoscopy Screening by Ethnicity, Maricopa County, 2012-2014**

	2012	2013	2014
White (non-Hispanic)	66.5%	69.6%	71.2%
Hispanic	49.0%	-	54.1%

**The percentage of adults 65+ who have ever received a pneumonia vaccination in Maricopa County is significantly lower than the U.S. and Arizona percentages.**



(Centers for Disease Control and Prevention, 2017), (Arizona Health Matters, n.d.)

**Table: Adults 65+ Who Have Ever Had a Pneumonia Vaccination, 2011-2013**

	2011	2012	2013
National	70.0%	68.8%	69.5%
Arizona	71.9%	66.2%	72.0%
Maricopa	31.0%	30.1%	34.1%

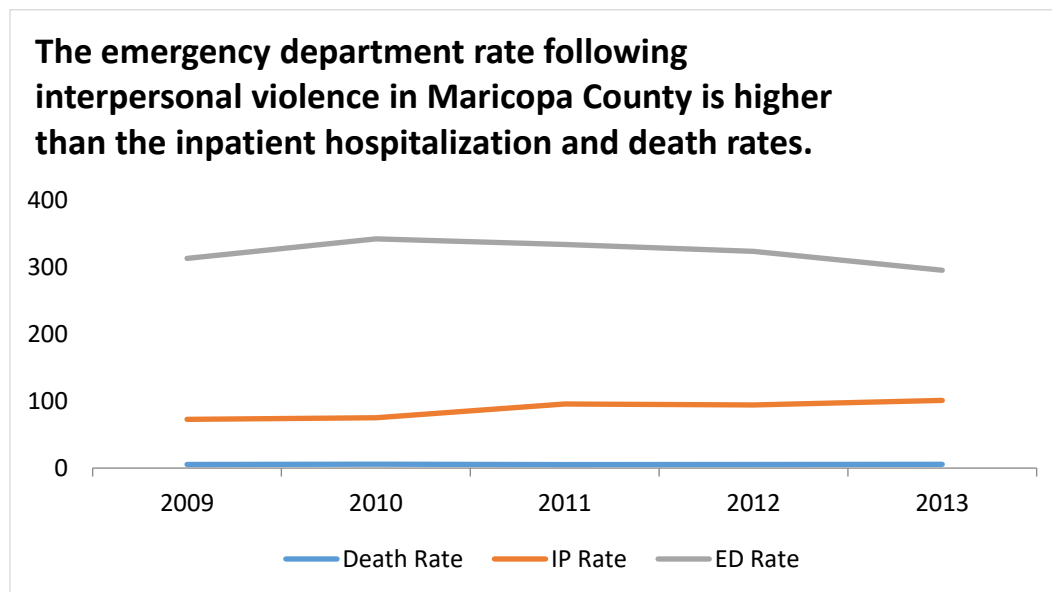
## Social Factors

According to HealthyPeople 2020, social determinants of health reflect the social factors and physical conditions of the environment in which people are born, live, learn, play, work, and age. These are also, known as *social and physical determinants* of health, they impact a wide range of health, function, and quality-of-life outcomes. Some examples of Social Factors include public safety, access to transportation, access to good schools, exposure to crime, violence and social disorder, socioeconomic factors, etc. (*Healthy People 2020, 2017*)

## Interpersonal Violence

Interpersonal violence is defined as “the intentional use of physical force or power, threatened or actual, against another person or against a group or community that results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation.” (*Krug, Dahlberg, & Mercy, 2002*)

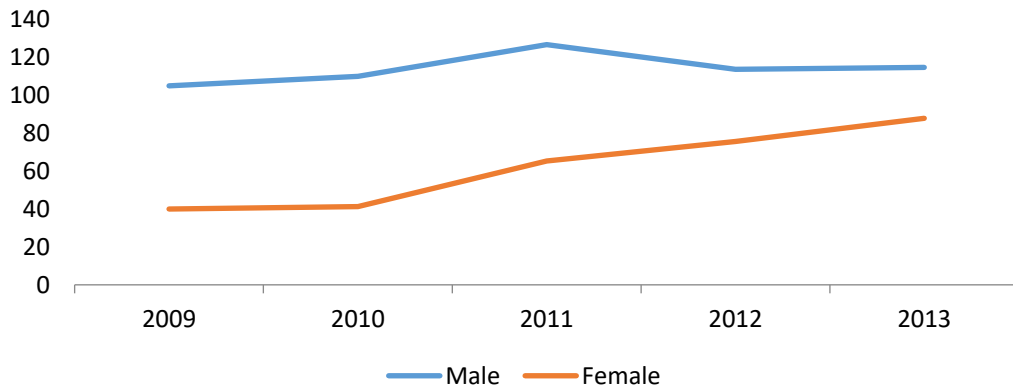
According to the graphs below, from 2009 to 2013 rates for emergency department visits far exceed hospitalization rates due to interpersonal violence. Hospitalization and emergency department visits are higher amongst males than females, and interpersonal violence is commonly higher in the American Indian population and those in the age group 20-24.



(Arizona Department of Health Services, n.d.)

Table: Comparison of Hospitalization Rates (IP & ED) to Death Rate Due to Interpersonal Violence, Maricopa County, 2009-2013					
	2009	2010	2011	2012	2013
Death Rate	5.3	5.8	5.2	5.3	5.7
IP Rate	72.7	75.2	95.6	94.3	101.0
ED Rate	313.0	342.1	333.8	323.4	295.3

**Males have a higher rate of inpatient hospitalization following interpersonal violence than females in Maricopa County.**

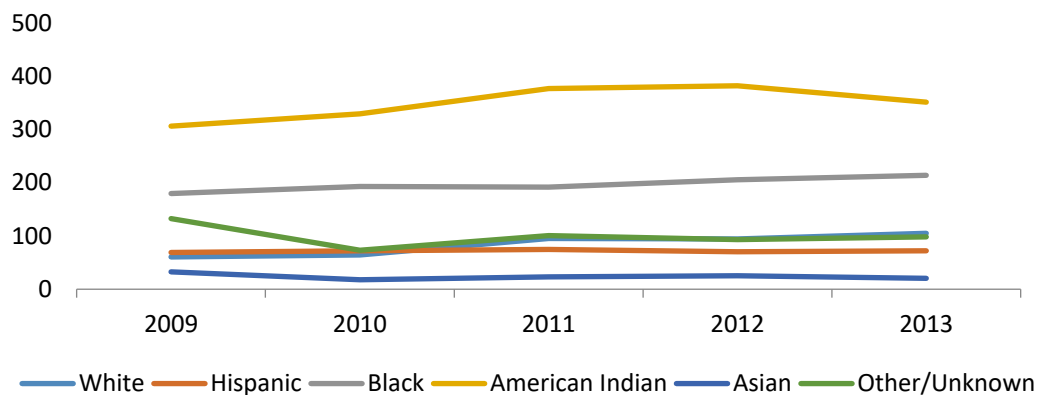


(Arizona Department of Health Services, n.d.)

**Table: Hospitalization Rates per 100,000 Due to Interpersonal Violence by Gender, Maricopa County, 2009-2013**

	2009	2010	2011	2012	2013
Male	104.8	109.8	126.6	113.6	114.6
Female	39.9	41.2	65.2	75.5	97.7

**American Indians have the highest rate of hospitalizations due to interpersonal violence than any other race in Maricopa County.**

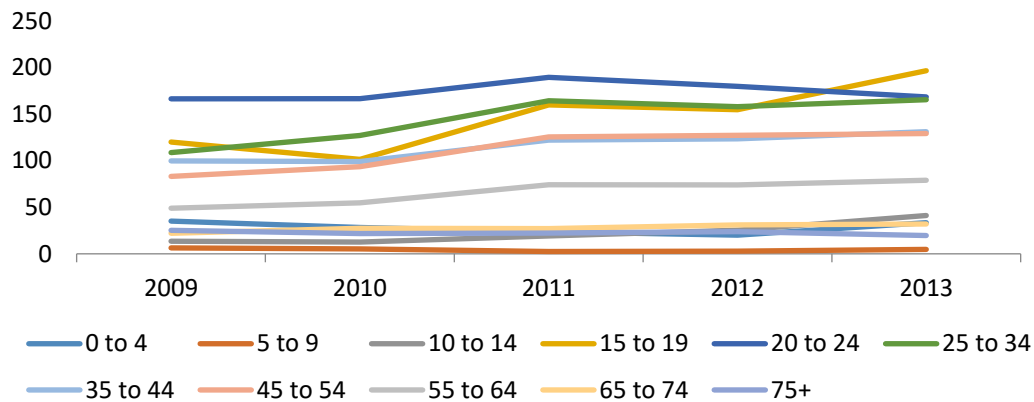


(Arizona Department of Health Services, n.d.)

**Table: Hospitalization Rates per 100,000 Due to Interpersonal Violence by Race, Maricopa County, 2009-2013**

	2009	2010	2011	2012	2013
White	60.6	64.2	95.2	94.2	105.0
Hispanic	68.9	72.0	74.7	70.2	72.1
Black	179.6	192.7	191.7	205.5	213.8
American Indian	306.0	329.1	376.5	381.8	351.0
Asian	32.6	17.8	23.3	25.3	20.4
Other/ Unknown	132.5	73.2	100.5	93.1	98.1

**The hospitalization rates due to interpersonal violence are highest among the age groups spanning 15-34 year olds in Maricopa County.**

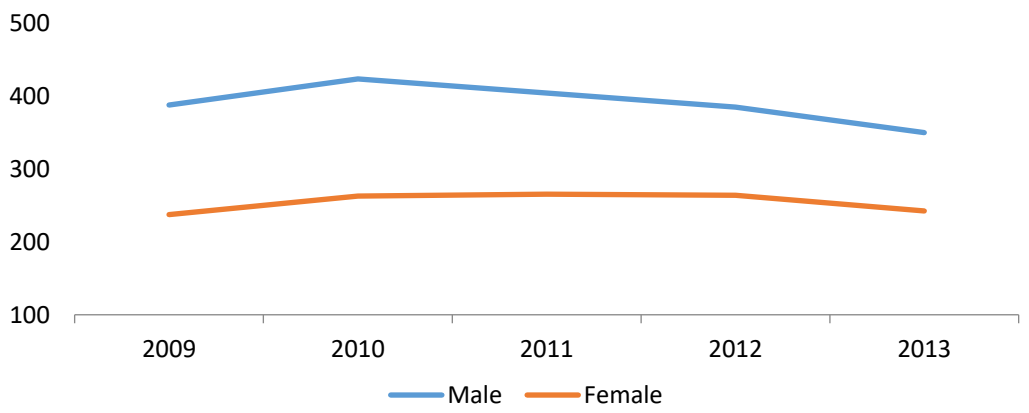


(Arizona Department of Health Services, n.d.)

**Table: Hospitalization Rates per 100,000 Due to Interpersonal Violence by Age Group, Maricopa County, 2009-2013**

	2009	2010	2011	2012	2013
0-4	35.1	28.3	23.7	20.1	33.5
5-9	6.3	5.3	2.5	2.8	4.8
10-14	13.5	12.6	19.2	25.4	41.2
15-19	120.1	101.5	160.0	154.8	196.7
20-24	166.5	166.7	189.6	179.9	168.5
25-34	108.8	127.1	164.4	158.1	165.6
35-44	99.9	99.1	122.1	123.5	131.2
45-54	83.2	93.7	125.5	127.4	129.2
55-64	49.0	54.7	74.2	74.1	79.0
65-74	22.0	27.4	27.2	31.0	32.0
75+	25.2	21.7	22.3	23.9	19.7

**Males have a higher rate of visiting the emergency department following interpersonal violence than females in Maricopa County.**

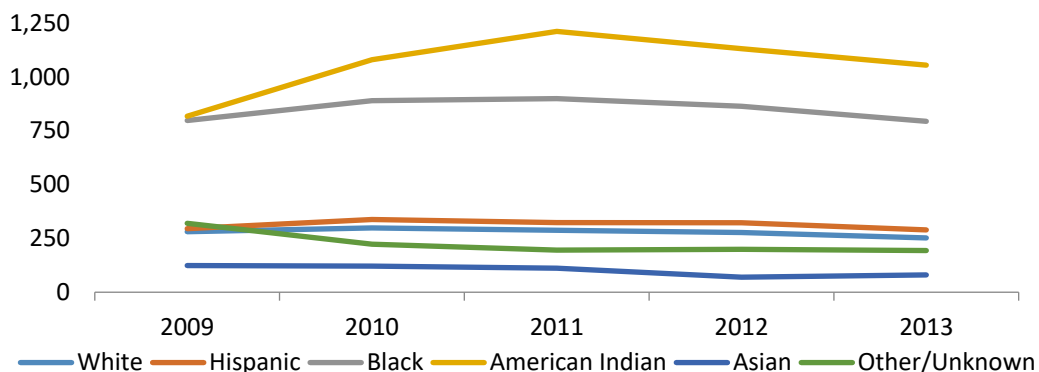


(Arizona Department of Health Services, n.d.)

**Table: Emergency Department Visit Rates per 100,000 Due to Interpersonal Violence by Gender, Maricopa County, 2009-2013**

	2009	2010	2011	2012	2013
Male	387.3	423.1	403.8	384.5	349.6
Female	237.2	262.7	265.2	263.7	242.2

**American Indians and African Americans have the highest rates of emergency department visits due to interpersonal violence in Maricopa County.**

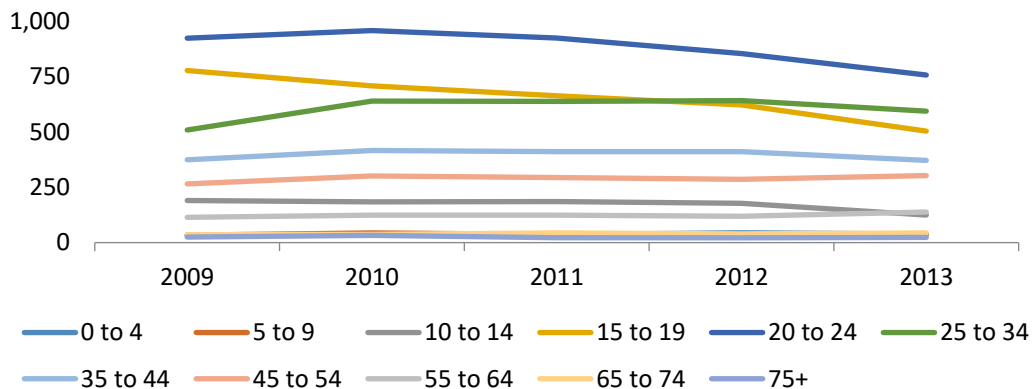


(Arizona Department of Health Services, n.d.)

**Table: Emergency Department Visit Rates per 100,000 Due to Interpersonal Violence by Race, Maricopa County, 2009-2013**

	2009	2010	2011	2012	2013
White	281.0	298.7	287.5	277.1	252.2
Hispanic	295.3	337.8	323.8	322.8	289.5
Black	198.0	889.6	899.4	863.9	793.9
American Indian	817.6	1,080.1	1,211.7	1,131.0	1,054.4
Asian	123.9	121.5	111.6	69.9	80.3
Other/ Unknown	320.1	223.4	195.4	199.6	193.6

**Emergency department visit rates due to interpersonal violence is highest among the ages spanning 15 - 34 in Maricopa County.**



(Arizona Department of Health Services, n.d.)

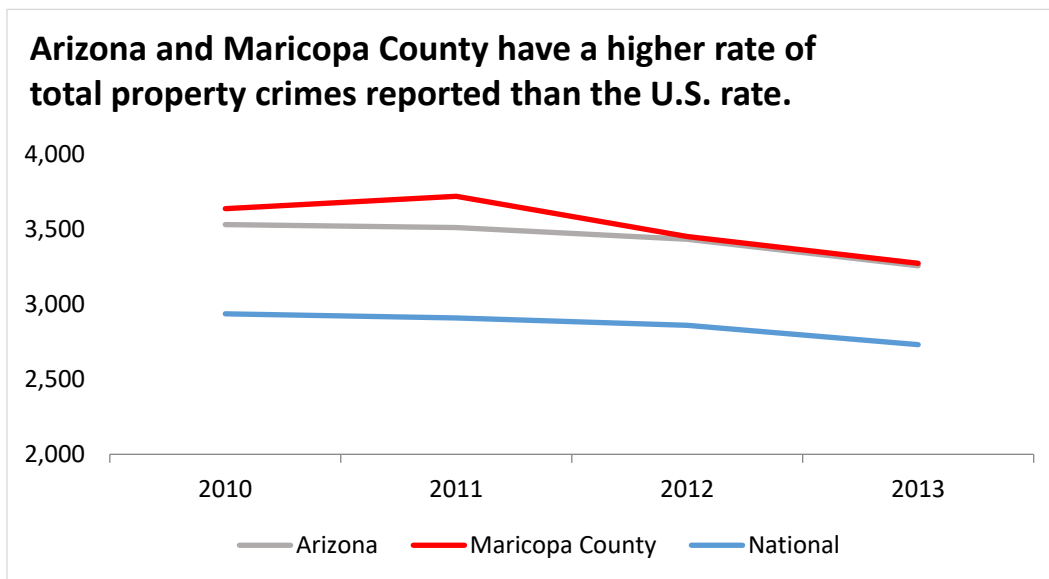
**Table: Emergency Department Visit Rates per 100,000 Due to Interpersonal Violence by Age Group, Maricopa County, 2009-2013**

	2009	2010	2011	2012	2013
0-4	32.7	33.6	36.9	44.1	39.0
5-9	33.6	43.9	37.3	38.7	36.7
10-14	190.1	184.3	185.2	177.4	124.5
15-19	776.9	707.5	662.7	621.8	503.5
20-24	923.2	957.4	923.9	853.6	756.7
25-34	508.4	638.9	637.3	641.2	593.4
35-44	374.2	415.9	410.6	410.9	371.2
45-54	265.1	300.8	293.7	285.5	302.7
55-64	114.3	124.3	124.0	118.8	138.0
65-74	35.9	37.2	43.9	39.3	43.7
75+	24.8	32.8	21.8	21.7	23.6

## Crime

According to the Federal Bureau of Investigation (FBI), property crime includes offenses of burglary, larceny-theft, motor vehicle theft, and arson. When it comes to violent crimes, it can be defined as a crime in which an offender uses or threatens force upon a victim. It is also composed of four offenses: murder and non-negligent manslaughter, forcible rape robbery, and aggravated assault. (*Federal Bureau of Investigation, 2011*)

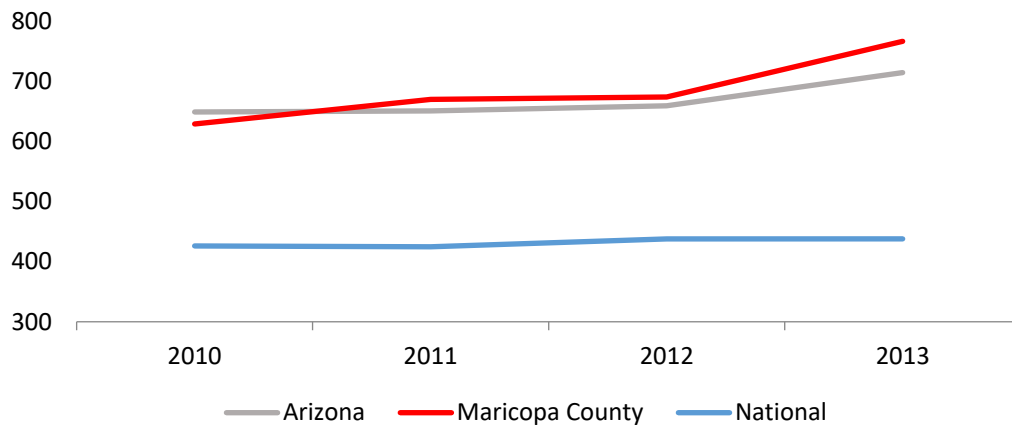
According to the graphs below, national rates of total property crimes reported is lower than at the County and State level compared to National levels. In addition, adult arrests from total property crime is higher at the County and State level, than it is at the National level. Data for total violent crimes reported show a substantial spike in 2012.



(Arizona Criminal Justice Commission, n.d.)

Table: Rate per 100,000 of Total Property Crimes Reported, 2010-2013				
	2010	2011	2012	2013
Arizona	3,530.4	3,511.1	3,433.3	3,256.1
Maricopa County	3,636.4	3,719.0	3,450.8	3,272.5
National	2,936.1	2,908.7	2,859.2	2,730.7

**Arizona and Maricopa County have a higher rate of adult arrests from total property crimes than the U.S.**

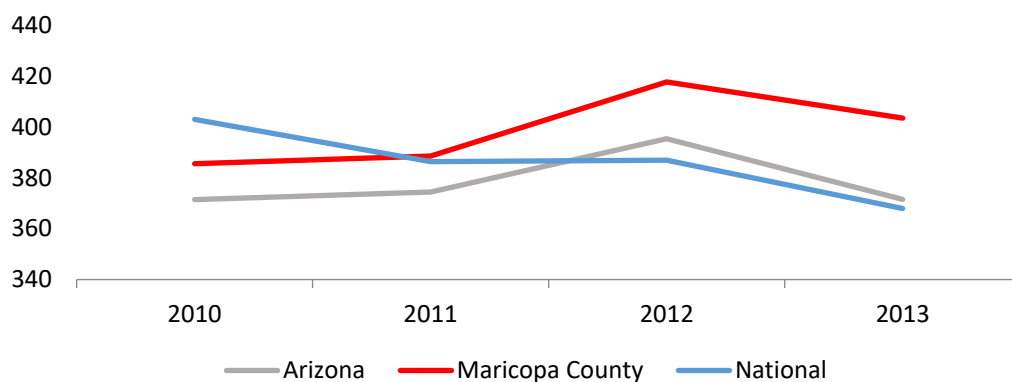


(Arizona Criminal Justice Commission, n.d.)

**Table: Rate per 100,000 of Adult Arrests from Total Property Crimes, 2010-2013**

	2010	2011	2012	2013
Arizona	649.4	651.3	659.7	715.0
Maricopa County	629.4	670.4	674.3	767.1
National	426.4	424.9	438.0	438.1

**Since 2011, the rate of total violent crimes reported in Maricopa County is higher than the rates reported for Arizona and the U.S.**

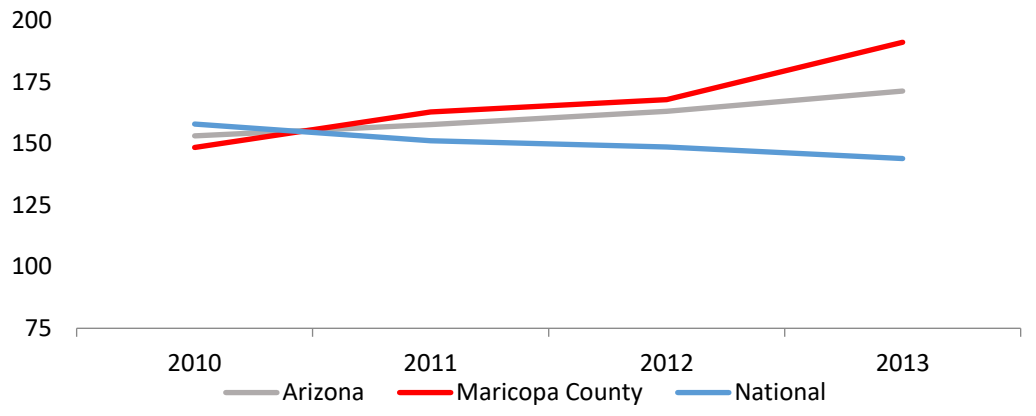


(Arizona Criminal Justice Commission, n.d.)

**Table: Rate per 100,000 of Total Violent Crimes Reported, 2010-2013**

	2010	2011	2012	2013
Arizona	371.4	374.4	395.3	371.5
Maricopa County	385.5	388.5	417.6	403.4
National	402.9	386.3	386.9	367.9

**Since 2011, the rate of adult arrests for total violent crimes reported in Maricopa County is higher than the rates reported for Arizona and the U.S.**



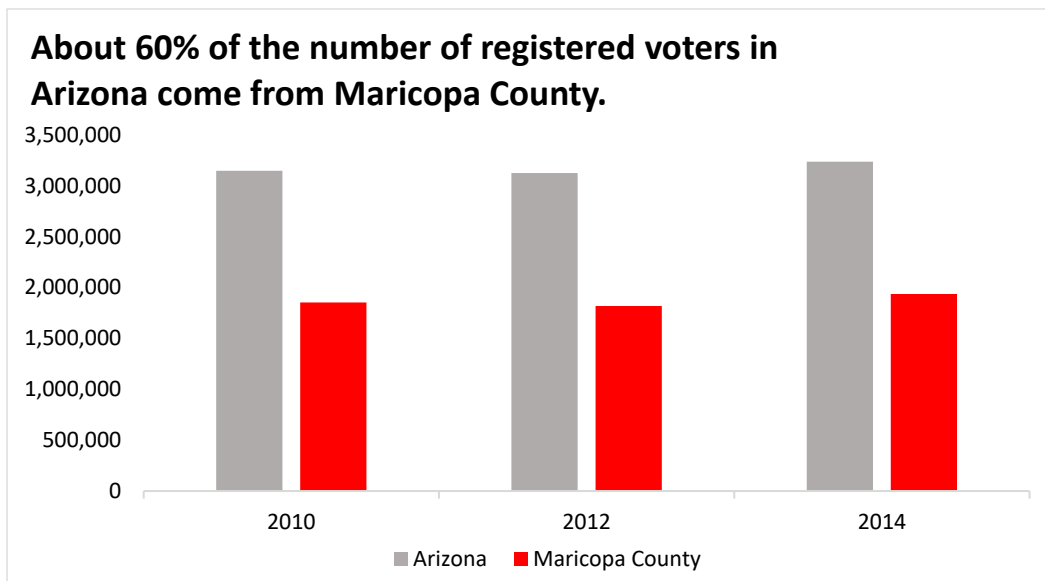
(Arizona Criminal Justice Commission, n.d.)

Table: Rate per 100,000 of Adults Arrests for Total Violent Crimes, 2010-2013				
	2010	2011	2012	2013
Arizona	153.1	157.7	163.1	171.3
Maricopa County	148.4	162.8	167.8	191.1
National	157.9	151.1	148.6	143.9

## Registered Voters

According the United States Census Bureau, Voting and Registration data has been collected biennially in the November Current Population Survey (also known as CPS) since 1964. People who are not United States citizens are not eligible to vote. To become a registered voter, there is a minimum age requirement set for the age of 18. The voting-age population also includes a considerable number of people who cannot register to vote despite meeting citizen and age requirements. Some people are not permitted to vote because they have been committed to the penal system, mental hospitals, or other institutions, or because they fail to meet state and local resident requirements for various reasons. (*United States Census Bureau, 2016*)

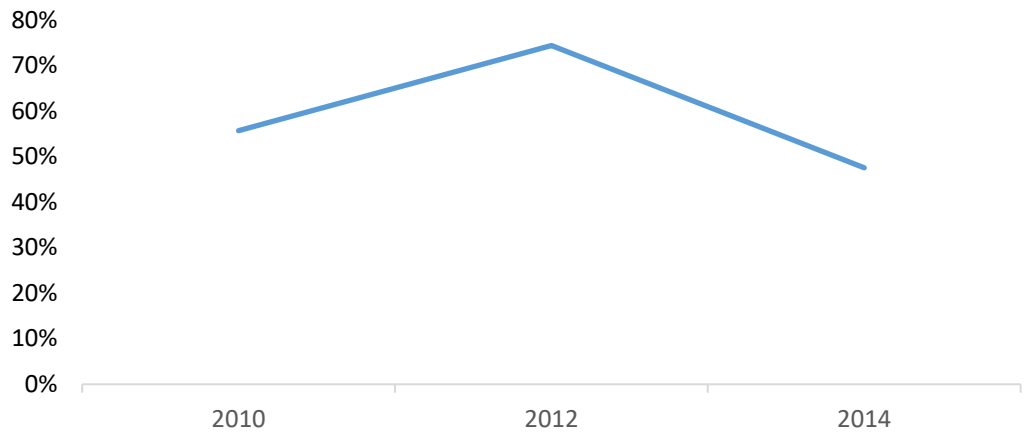
The graph below shows a comparison between Maricopa County and the entire state of Arizona for registered voters between 2010 and 2014. Data shows that the number of registered voters slightly increased in 2014 for both Maricopa County and the entire state. Voter turnout evaluates the percentage of eligible voters who cast a ballot in an election. In 2012, the state of Arizona saw a proportionately higher percentage of voter turnout, whereas in 2014, there was almost a 30% decrease.



(Arizona Secretary of State, 2010), (Arizona Secretary of State, 2012), (Arizona Secretary of State, 2014)

Table: Number of Registered Voters, 2010, 2012, and 2014			
	2010	2012	2014
Arizona	3,146,418	3,124,712	3,235,963
Maricopa County	1,851,956	1,817,832	1,935,729

**In 2012, the Arizona voter turnout was the highest compared to 2010 and 2014.**



(Arizona Secretary of State, n.d.)

Table: Arizona's Voter Turnout, 2010, 2012, and 2014			
	2010	2012	2014
Arizona	55.7%	74.4%	47.5%

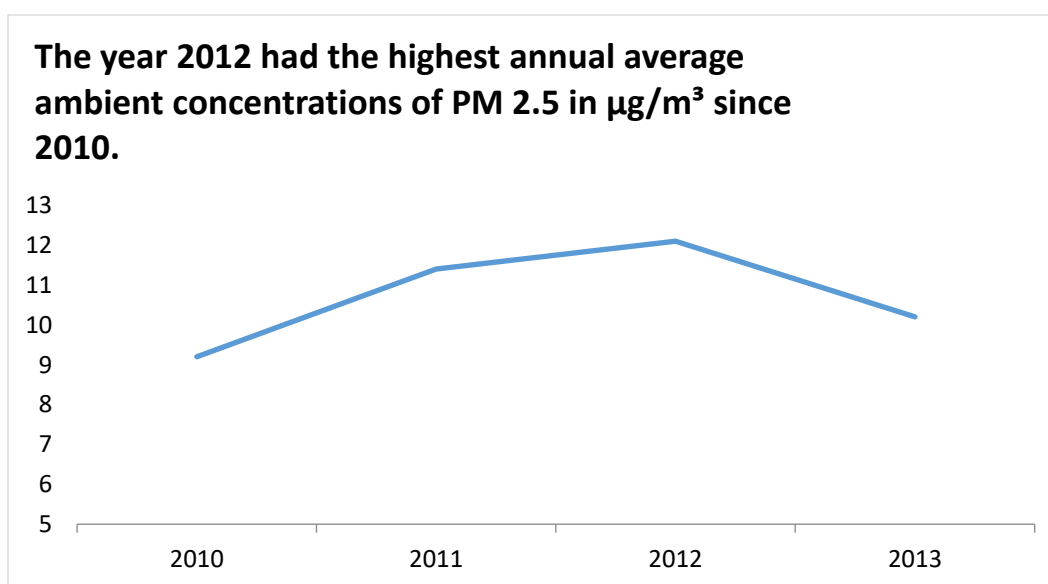
## Physical Environment

A healthy environment is an integral piece in providing healthy choices for individuals. Where those individuals live, work, learn, and play can have broad effects on their health. By making healthier choices readily available, the burden of chronic diseases can be reduced. (*Centers for Disease Control and Prevention, 2016*)

### Air Quality

In 1970 the Clean Air Act (CAA) was signed into law and set requirements for States, local, and Tribal entities to assess and protect air quality through an air monitoring program. The U.S. EPA regulates criteria pollutants (CPs) using the National Ambient Air Quality Standards (NAAQS). These standards establish levels for each CP by using health and welfare-based criteria. (*EPA United States Environmental Protection Agency, 2017*)

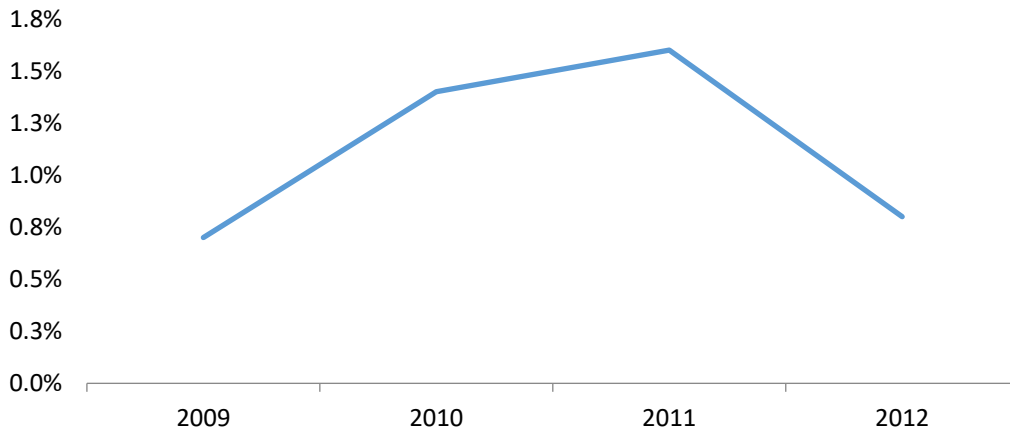
Studies have been done that show air pollution exposure has an effect on health and specifically can act as a trigger for asthma. Ozone and particulate matter (PM) are often found in smog, dust, and smoke, and are two of the six criteria pollutants (CPs) that are monitored by the Maricopa County Department of Air Quality (MCDEQ). (Stewart, 2016)



(Centers for Disease Control and Prevention, n.d.)

Table: Annual Average Ambient Concentrations of PM 2.5 in $\mu\text{g}/\text{m}^3$ , 2010-2013				
	2010	2011	2012	2013
Maricopa County	9.2	11.4	12.1	10.2

**The year 2011 had the highest percentage of days with PM 2.5 levels over the NAAQS since 2009.**

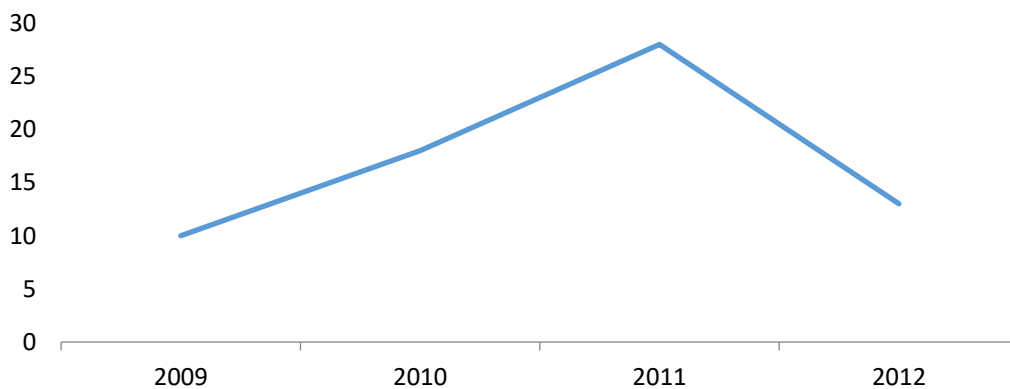


(Centers for Disease Control and Prevention, n.d.)

**Table: Percent of Days with PM 2.5 levels over the National Ambient Air Quality Standards, 2009-2012**

	2009	2010	2011	2012
Maricopa County	0.7%	1.4%	1.6%	0.8%

**In 2011, the number of days with maximum 8-hour average ozone concentrations over the NAAQS was highest since 2009.**



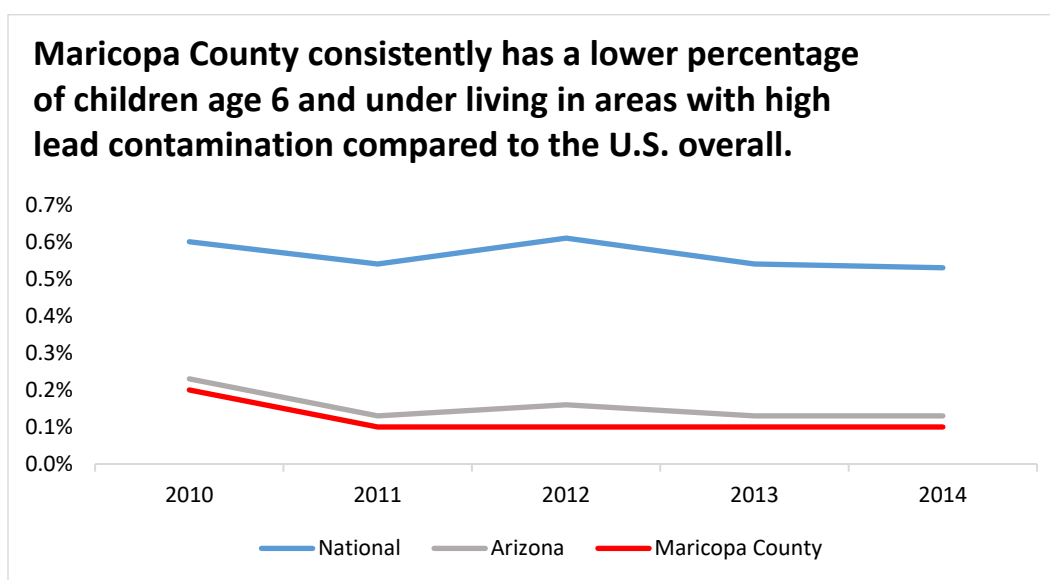
(Centers for Disease Control and Prevention, n.d.)

**Table: Number of Days with Maximum 8-Hour Average Ozone Concentration over the National Ambient Air Quality Standards, 2009-2012**

	2009	2010	2011	2012
Maricopa County	10	18	28	13

## Lead Exposure

There are at least 4 million households in the U.S. that have children living in them that have high lead levels and around half a million children between the ages of 1-5 have blood lead levels above 5 micrograms per deciliter (the reference level that the Centers for Disease Control and Prevention recommends action be taken). No blood lead level is safe and lead exposure can affect almost every system in the body. Children exposed to lead have an increased risk of damage to the brain and nervous system, slowed growth and development, learning and behavior problems, and hearing and speech problems. *(Centers for Disease Control and Prevention, 2017)* There are fifty-two high risk zip codes in Arizona, with the majority being within the cities of Phoenix and Tucson. Maricopa County has 67 zip codes that are considered high risk. *(Arizona Department of Health Services, n.d.)*

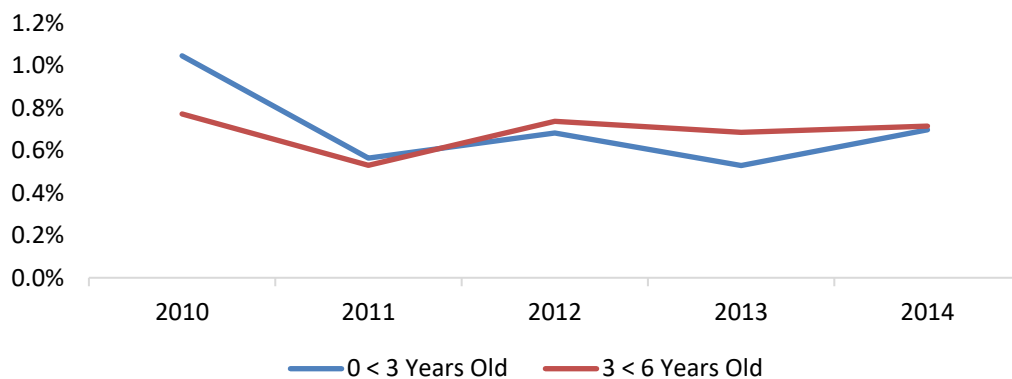


(Centers for Disease Control and Prevention, 2016), (Centers for Disease Control and Prevention, 2016)

Table: Percentage of Children Age 6 & Under Living in Areas with High Lead Contamination, 2010-2014

	2010	2011	2012	2013	2014
National	0.6%	0.5%	0.6%	0.5%	0.5%
Arizona	0.2%	0.1%	0.2%	0.1%	0.1%
Maricopa County	0.2%	0.1%	0.1%	0.1%	0.1%

**The percentage of children with blood levels between 5-10 µg/dL in Maricopa County dropped in 2011 and has fluctuated very little since.**



(Centers for Disease Control and Prevention, n.d.)

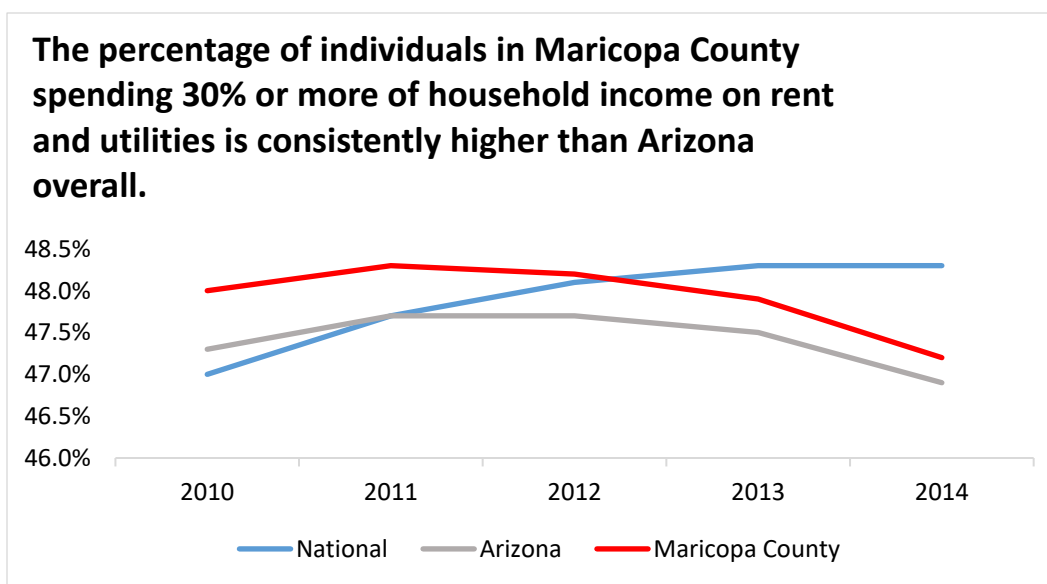
**Table: Percentage of Children with Blood Levels Between 5-10 µg/dL, Maricopa County, 2010-2013**

	2010	2011	2012	2013	2014
0 < 3 Years Old	1.1%	0.6%	0.7%	0.5%	0.7%
3 < 6 Years Old	0.8%	0.5%	0.7%	0.7%	0.7%

## Rent

According to the American Community Survey, median monthly gross residential rent in the United States was \$959.00 in 2015. At this rate, the median gross rent in the United States was at its highest level in 2015 since 2005. *(United States Census Bureau, n.d.)*

According to the graphs below, individuals spending 30% or more of Household Income on rent and utilities has increased nationally, but had decreased in Maricopa County and in the State of Arizona. In addition, Median Home Values have risen from 2010 to 2014.

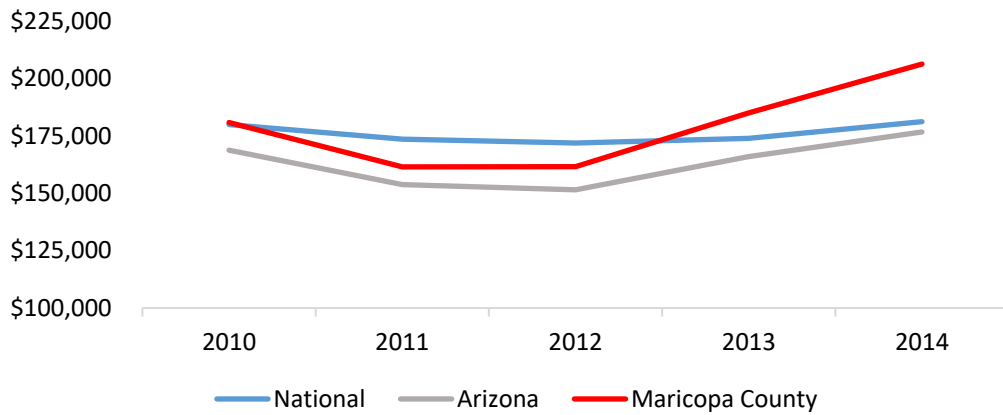


(United States Census Bureau), (United States Census Bureau), (United States Census Bureau), (United States Census Bureau), (United States Census Bureau)

Table: Percent of Individuals Spending 30% or More of Household Income on Rent and Utilities, 2010-2014

	2010	2011	2012	2013	2014
National	47.0%	47.7%	48.1%	48.3%	48.3%
Arizona	47.3%	47.7%	47.7%	47.5%	46.9%
Maricopa County	48.0%	48.3%	48.2%	47.9%	47.2%

**The median value of homes in Maricopa County has been increasing since 2012 and is greater than Arizona and the National median home value.**



(United States Census Bureau), (United States Census Bureau), (United States Census Bureau), (United States Census Bureau), (United States Census Bureau)

**Table: Median Home Value, 2010-2014**

	2010	2011	2012	2013	2014
National	\$179,900	\$173,600	\$171,900	\$173,900	\$181,200
Arizona	\$168,800	\$153,800	\$151,500	\$166,000	\$176,700
Maricopa County	\$180,800	\$161,500	\$161,600	\$185,000	\$206,300

## Transportation

According to the American Public Transportation Association, public transportation in the United States is a crucial part of the solution to the nation's economic, energy, and environmental challenges. This brings a better quality of life. In 2016, Americans took 10.4 billion trips on public transportation. (*American Public Transportation Association, 2017*)

The graphs below show that cars, trucks, and vans are the most common mode of transportation where drivers drive in their own vehicles alone to work. This was common when looking at the national, state, and local level.

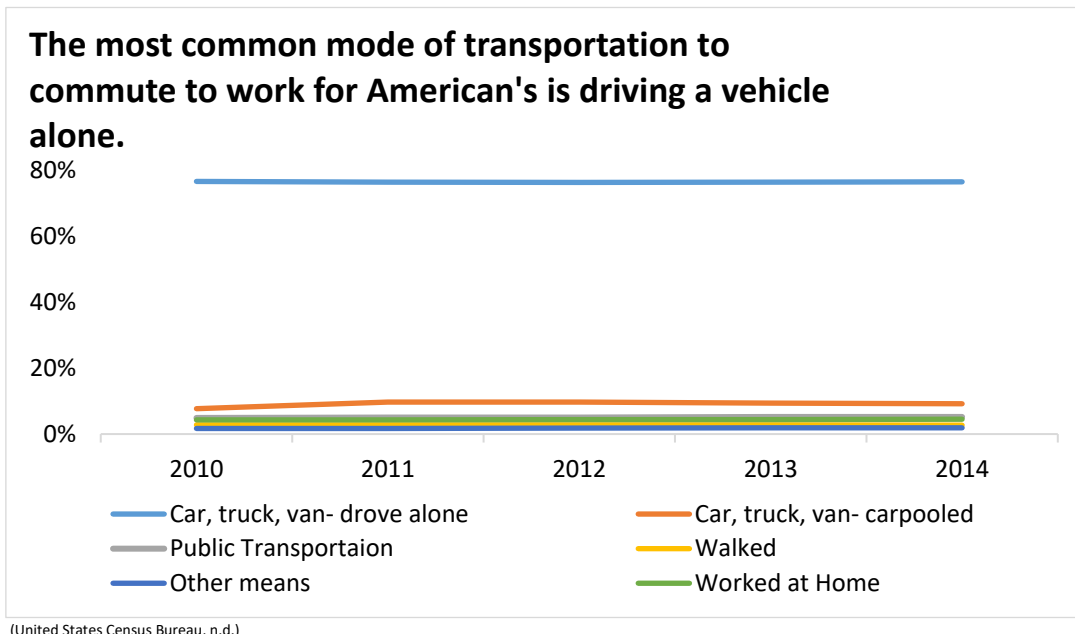
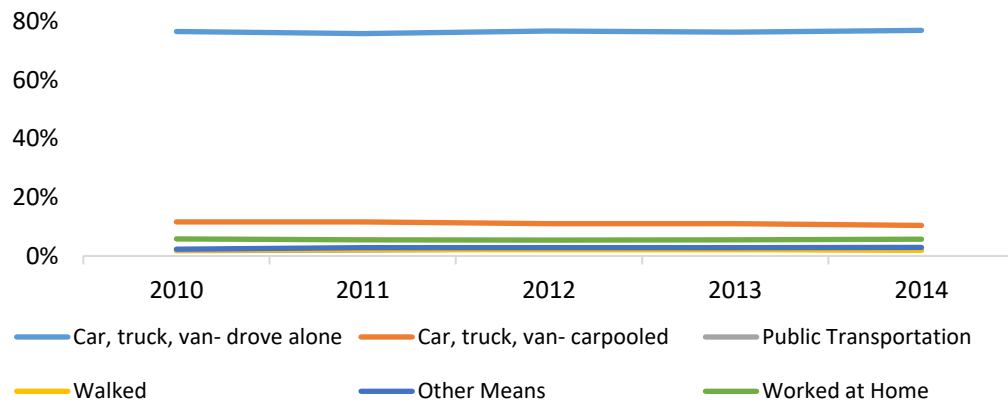


Table: Mode of Transportation to Work, National, 2010-2014					
	2010	2011	2012	2013	2014
Car, truck, van- drove alone	76.6%	76.4%	76.3%	76.4%	76.5%
Car, truck, van- carpooled	9.7%	9.7%	9.7%	9.4%	9.2%
Public Transportation	4.9%	5.0%	5.0%	5.2%	5.2%
Walked	2.8%	2.8%	2.8%	2.8%	2.7%
Other means	1.7%	1.7%	1.8%	1.9%	1.9%
Worked at Home	4.3%	4.3%	4.4%	4.4%	4.5%

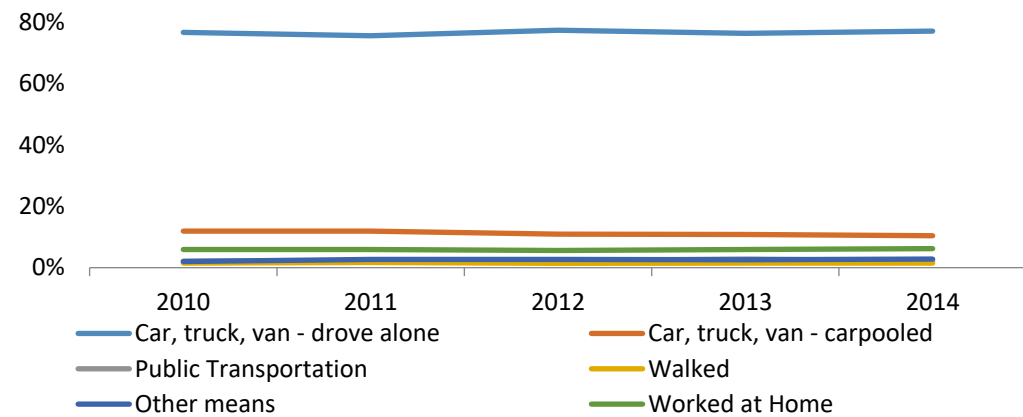
**The most common mode of transportation to commute to work for Arizona residents is driving a vehicle alone.**



(United States Census Bureau, n.d.)

Table: Mode of Transportation to Work, Arizona, 2010-2014					
	2010	2011	2012	2013	2014
Car, truck, van- drove alone	76.5%	75.8%	76.7%	76.3%	76.9%
Car, truck, van- carpooled	11.6%	11.6%	11.0%	11.0%	10.4%
Public Transportation	1.8%	2.0%	2.4%	2.4%	2.0%
Walked	2.0%	2.2%	2.1%	2.1%	2.0%
Other means	2.3%	2.8%	2.8%	2.8%	2.9%
Worked at Home	5.8%	5.5%	5.4%	5.5%	5.7%

**The most common mode of transportation to work for Maricopa County residents is driving a vehicle alone.**



(United States Census Bureau, n.d.)

Table: Mode of Transportation to Work, Maricopa County, 2010-2014					
	2010	2011	2012	2013	2014
Car, truck, van- drove alone	76.6%	75.5%	77.3%	76.3%	77.0%
Car, truck, van- carpooled	11.9%	11.9%	10.8%	10.8%	10.4%
Public Transportation	2.1%	2.3%	2.3%	2.8%	2.2%
Walked	1.5%	1.7%	1.4%	1.5%	1.5%
Other means	2.0%	2.7%	2.7%	2.6%	2.8%
Worked at Home	5.9%	5.9%	5.6%	5.6%	6.2%

## Parks and Recreations

Parks and Recreation are critical to communities because they provide economic value, health and environmental benefits, and social importance. They help provide quality of life in communities and ensure the health of families and youth. They contribute to the economic and environmental well-being of a community, and communities pride themselves on having accessible parks within their neighborhoods. It is important to note that data on parks and recreations among neighborhoods is self-reported. Therefore, some of the data is missing and not a reflection of persons and their neighborhoods.

### Economic Value

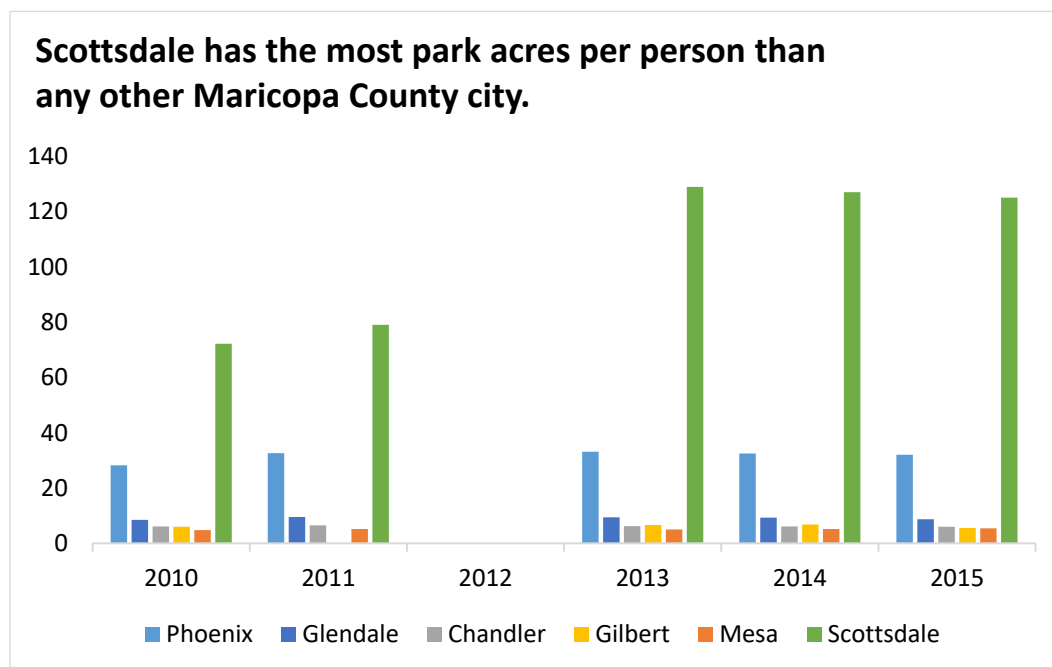
Parks are able to increase property value, which improves local economies. In addition, trees in cities can save \$400 billion in storm water retention facility costs. Parks and recreation programs also produce a significant portion of operating costs from revenue generated from fees and charges.

### Health and Environmental Benefits

Living near a park offers greater opportunities and access to be active which can help adults and children stay fit, get healthy, and reduce stress. Parks with trees help to improve the air by removing toxins, improve water quality, protect groundwater, prevent flooding, produce habitat for wildlife, and provide a place for people to connect with nature.

### Social Importance

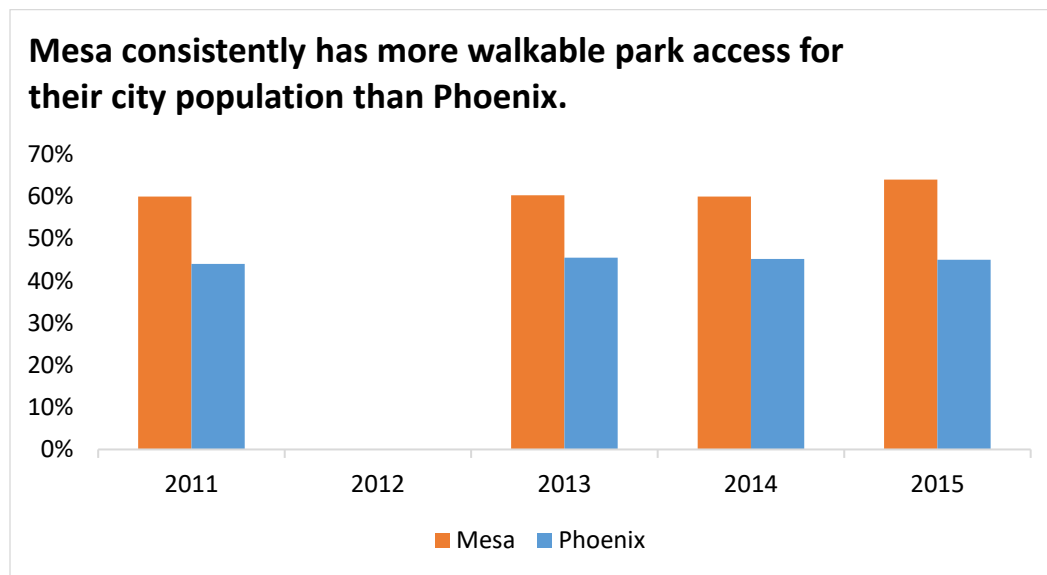
Having parks and recreational options provide identity to residents and their communities, and it can be viewed as a tangible reflection of a particular community. Parks also provide a space for families, friends, and children to gather regardless of their socioeconomic status. *(National Recreation and Park Association)*



(Harnik, Martin, & Treat, 2016 City Park Facts, 2016), (Harnik, Martin, & Barnhart, 2015 City Park Facts, 2015), (Harnik, Martin, & O'Grady, 2014 City Park Facts, 2014), (Harnik, Donahue, & Weiswerda, 2012 City Park Facts, 2012), (The Trust for Public Land, 2011)

Table: Park Acres per Person, 2010-2015						
	2010	2011	2012	2013	2014	2015
Phoenix	28.2	32.6	-	33.1	32.5	32.0
Glendale	8.5	9.5	-	9.4	9.3	8.7
Chandler	6.1	6.5	-	6.2	6.1	6.0
Gilbert	6.0	-	-	6.6	6.8	5.5
Mesa	4.8	5.2	-	5.0	5.2	5.4
Scottsdale	72.2	79.0	-	128.9	127.0	125.0

*These are self-reported and none of the cities reported in 2012.*

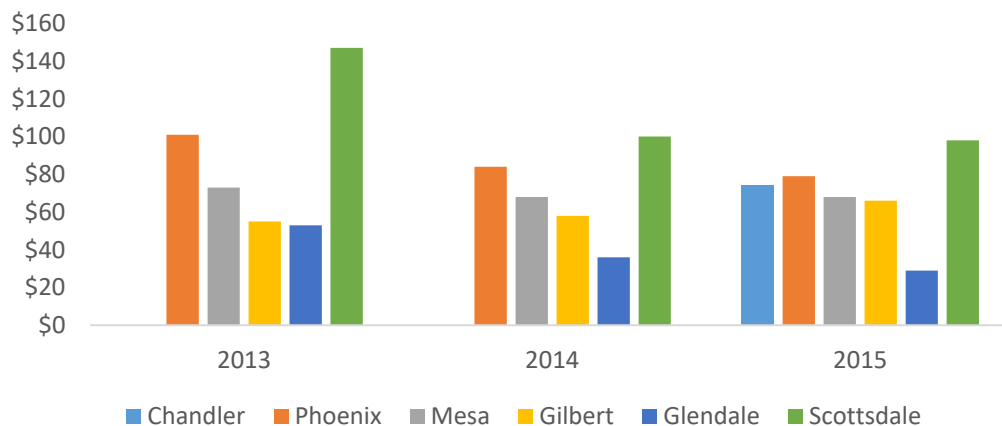


(Harnik, Martin, & Treat, 2016 City Park Facts, 2016), (Harnik, Martin, & Barnhart, 2015 City Park Facts, 2015), (Harnik, Martin, & O'Grady, 2014 City Park Facts, 2014), (Harnik, Donahue, & Weiswerda, 2012 City Park Facts, 2012), (The Trust for Public Land, 2011)

Table: City Populations with Walkable Park Access, 2010-2015					
	2011	2012	2013	2014	2015
Mesa	60.0%	-	60.3%	60.0%	64.0%
Phoenix	44.0%	-	45.5%	45.2%	45.0%

*These are self-reported and none of the cities reported in 2012.*

**Since 2013, Scottsdale spends the most money on parks and recreation per resident than the other city in Maricopa County.**



(Harnik, Martin, & Treat, 2016 City Park Facts, 2016), (Harnik, Martin, & Barnhart, 2015 City Park Facts, 2015), (Harnik, Martin, & O'Grady, 2014 City Park Facts, 2014), (Harnik, Donahue, & Weiswerda, 2012 City Park Facts, 2012), (The Trust for Public Land, 2011)

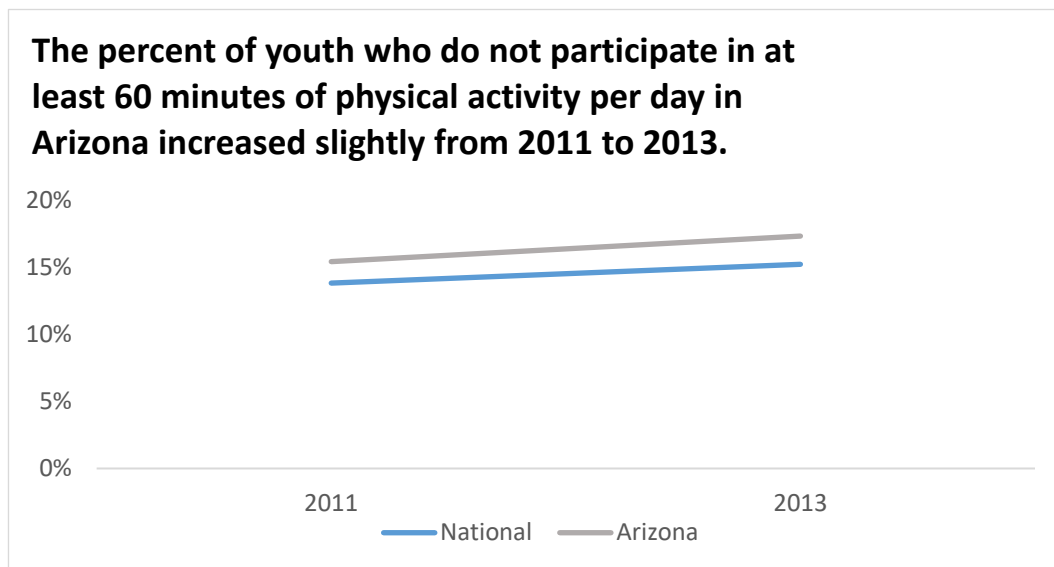
Table: Total Spending on Parks and Recreations per Resident (Dollars), 2010-2015						
	2010	2011	2012	2013	2014	2015
Chandler	165	-	-	-	-	74
Phoenix	110	-	-	101	84	79
Mesa	75	-	-	73	68	68
Gilbert	-	-	-	55	58	66
Glendale	87	-	-	53	36	29
Scottsdale	-	-	-	147	100	98

*These are self-reported and none of the cities reported in 2012.*

## Youth Data

According to the Centers for Disease Control and Prevention, regular physical activity in childhood and adolescence has numerous benefits including helping build and maintain healthy bones and muscles. In addition, it reduces the risk of developing obesity and other chronic diseases. When it comes to mental well-being, regular physical activity reduces the feelings of depression and anxiety. The U.S. Department of Health and Human Services recommends young people (ages 6 through 17) participate in a minimum of 60 minutes of physical activity on a daily basis.

The data in the graph below looks at youth who do not participate in at least 60 minutes of physical activity per day. The graph compares national and state data for 2011 and 2013. Both results demonstrate a slight increase, although the percentage of youth who do not participate in the state of Arizona is slightly higher in comparison to the national percentage (*Centers for Diseases Control and Prevention, 2015*).

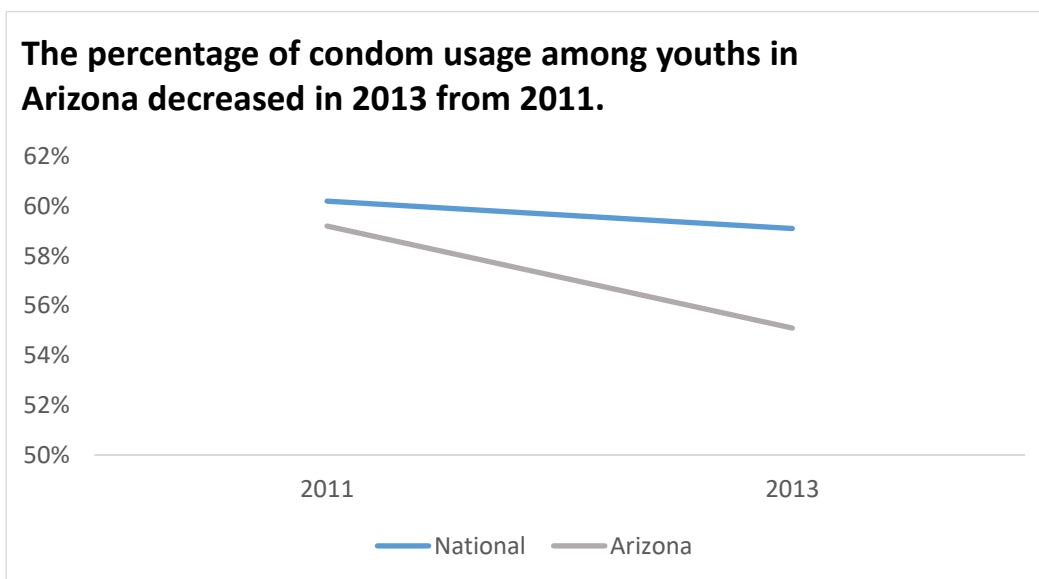


(Centers for Disease Control and Prevention, n.d.)

Table: Percent of Youth Who Do Not Participate in at least 60 Minutes of Physical Activity Per Day, 2011 and 2013		
	2011	2013
National	13.8	15.2
Arizona	15.4	17.3

## Birth Control Usage among Teens

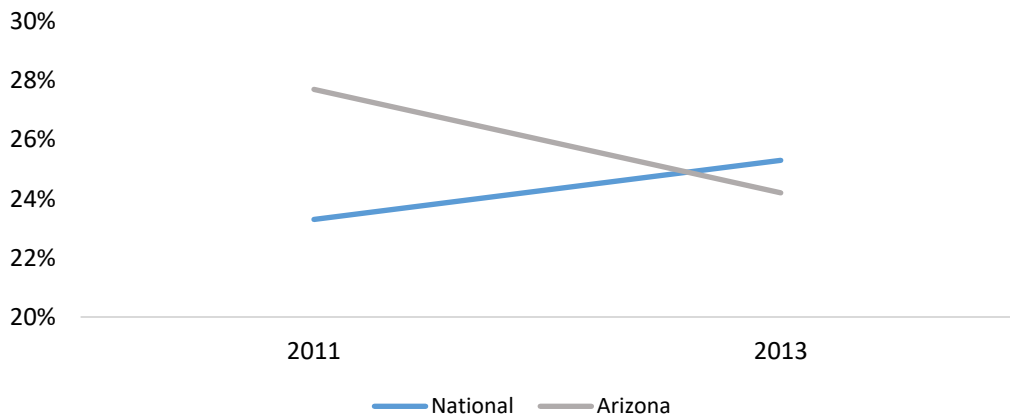
Teen pregnancy is a “winnable battle” in public health for the CDC’s top seven priorities, and the risk of teen pregnancy has declined drastically over the years of 2007 to 2015. Birth rates to teens fell from 41.5 per 1,000 in 2007 to 22.3 per 1,000 births in 2015. Teen pregnancy has social and economic impacts on teen parents and their children, and contributes to young mothers having lower school achievement and an increase of dropping out of high school. In 2010, teen pregnancy and childbirth accounted U.S. taxpayers at least \$4.9 billion for increased health care and foster care, and lost tax revenue because of lower educational attainment and income among teen moms. The effects only continue for teen mothers and their child, such as growing up in poverty. (*Center for Disease Control and Prevention, 2017*)



(Eaton, et al., 2012), (Kann, et al., 2014)

Table: Percent of Condom Usage Among Youths, 2011 and 2013		
	2011	2013
National	60.2%	59.1%
Arizona	59.2%	55.1%

**The percentage of birth control (*birth control pills; an IUD or implant, shot, patch, or birth control ring*) use among youths in Arizona decreased in 2013.**



(Centers for Disease Control and Prevention, n.d.)

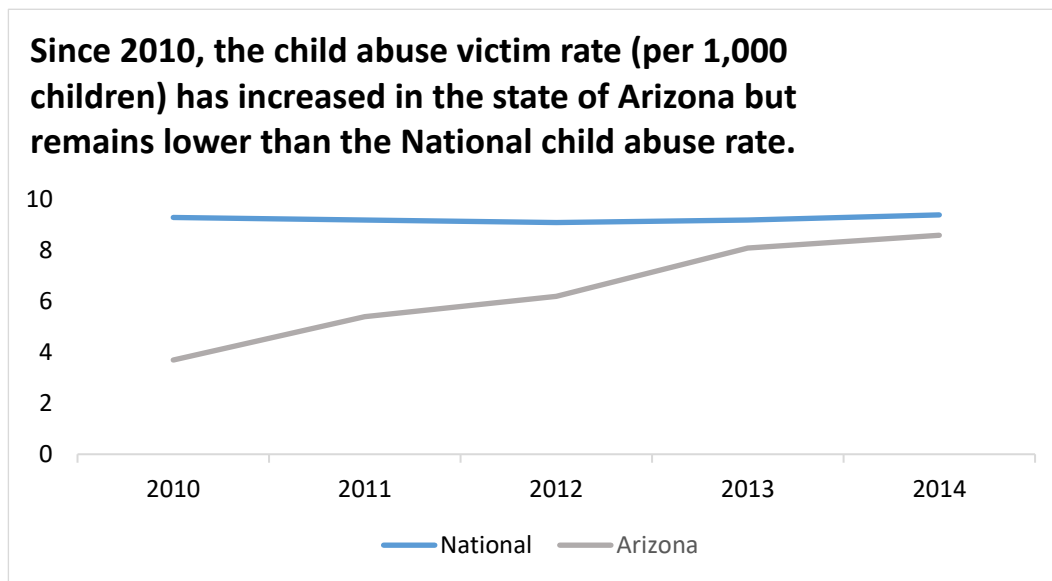
**Table: Percent of Birth Control Usage Among Youths (*Used Birth Control Pills; an IUD or Implant, Shot, Patch, or Birth Control Ring*) , 2011 and 2013**

	2011	2013
National	23.3%	25.3%
Arizona	27.7%	24.2%

## Child Abuse

According to the National Center for Injury Prevention and Control, in 2012, an estimated 1,640 children died from child maltreatment. Approximately, 27% of victims were younger than 3 years, 20% of victims were age 3-5 years, and children younger than 1 year have the highest rate of victimization (21.9 per 1,000 children). Of child maltreatment fatalities in 2012, 70% occurred among children younger than age 3. (Centers for Diseases Control and Prevention, 2014)

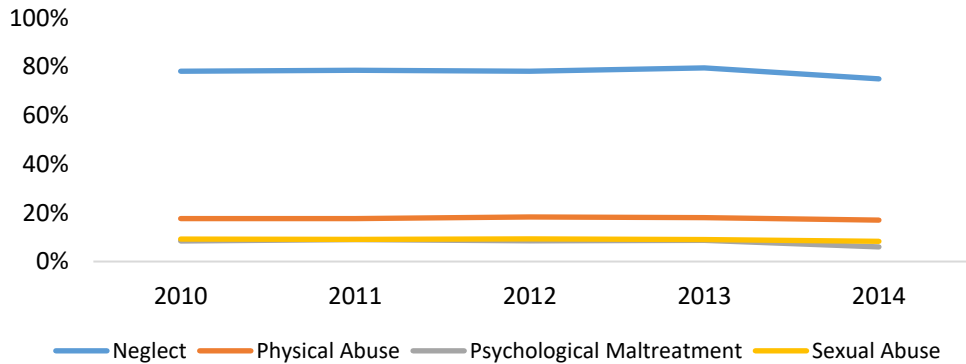
According to the graphs below, from 2010 to 2014, the rate of child abuse victims has more than doubled in the state of Arizona. National rates have been steady over that same time period. However, national rates are slightly higher than the state of Arizona. In addition, neglect cases seem to be the most common type of child abuse in Arizona and the U.S.



(Administration for Children and Families, 2016)

Table: Child Abuse Victim Rate (per 1,000 Children), 2010-2014					
	2010	2011	2012	2013	2014
National	9.3	9.2	9.1	9.2	9.4
Arizona	3.7	5.4	6.2	8.1	8.6

**The most common type of child abuse in the U.S. is neglect, followed by physical abuse.**

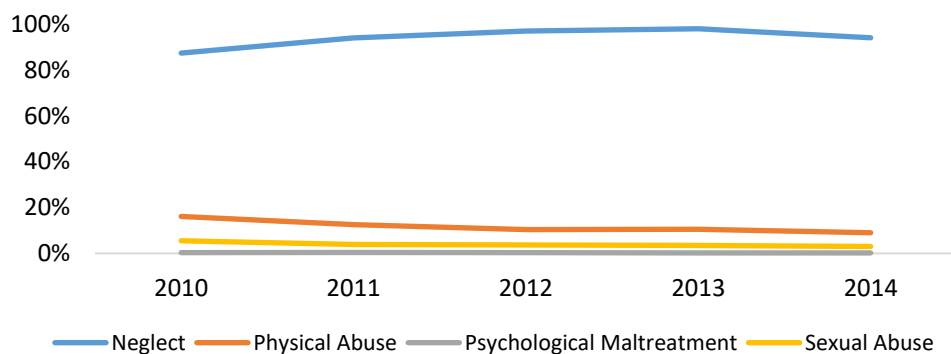


(Administration for Children and Families, 2016), (Administration for Children and Families, 2015)

**Table: Percent of Child Abuse by Type, U.S., 2010-2014**

	2010	2011	2012	2013	2014
Neglect	78.1%	78.5%	78.1%	79.5%	75.0%
Physical Abuse	17.6%	17.6%	18.3%	18.0%	17.0%
Psychological Maltreatment	8.4%	9.0%	8.5%	8.7%	6.0%
Sexual Abuse	9.2%	9.1%	9.3%	9.0%	8.3%

**The most common type of child abuse in Arizona is neglect, followed by physical abuse.**



(Administration for Children and Families, 2013) (Administration for Children and Families, 2016), (Administration for Children and Families, 2015), (Administration for Children and Families, 2011), (Administration for Children and Families, 2012),

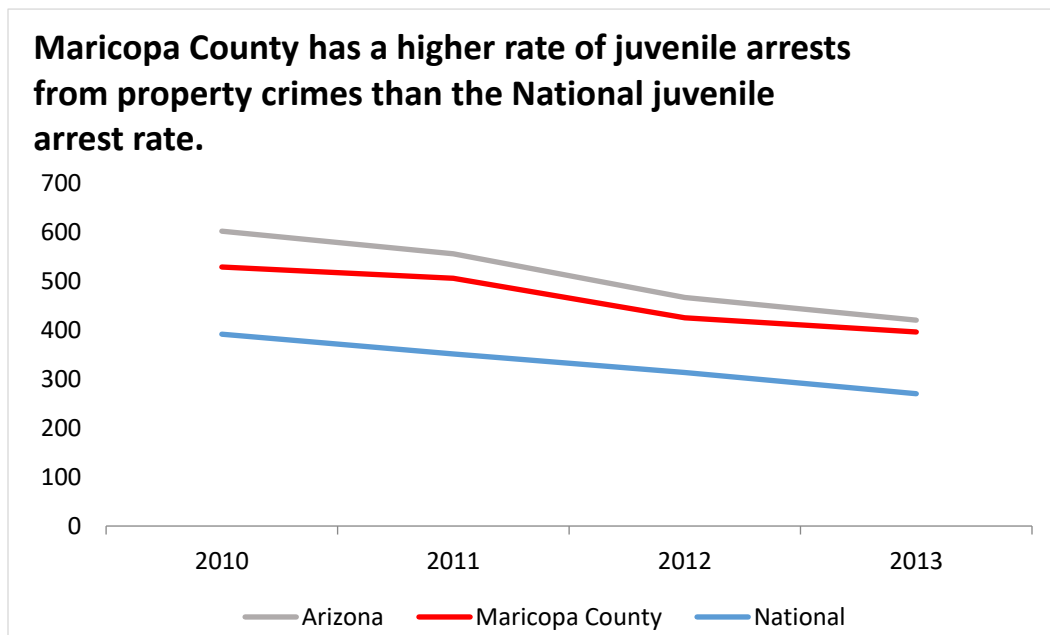
**Table: Percent of Child Abuse by Type, Arizona, 2010-2014**

	2010	2011	2012	2013	2014
Neglect	87.3%	93.9%	96.9%	97.9%	94.0%
Physical Abuse	16.1%	12.5%	10.4%	10.5%	9.0%
Psychological Maltreatment	0.3%	0.4%	0.3%	0.2%	0.2%
Sexual Abuse	5.5%	3.9%	3.7%	3.5%	3.0%

## Juvenile Arrests and Community Attachment

In 2010, juveniles (<18 years) accounted for 13.7% of all violent crime arrests and 22.5% of all property crime arrests. In addition, 784 juveniles were arrested for murder, 2,198 for forcible rape, and 35,000 for aggravated assault. (*Centers for Disease Control and Prevention, 2012*) When it comes to keeping youth out of trouble, strong neighborhood attachment is considered a protective factor.

The graphs below look at juvenile arrests and neighborhood attachment. The state of Arizona and Maricopa County, have higher rates of juvenile arrests for total property crimes in comparison to National data. And youth across the board show to be less attached to their neighborhoods than in previous years along with less youth perceiving that there are community rewards for pro-social involvement. However, from 2010 through 2013, violent juvenile crimes have been on a steady decline amongst national, state, and local data.

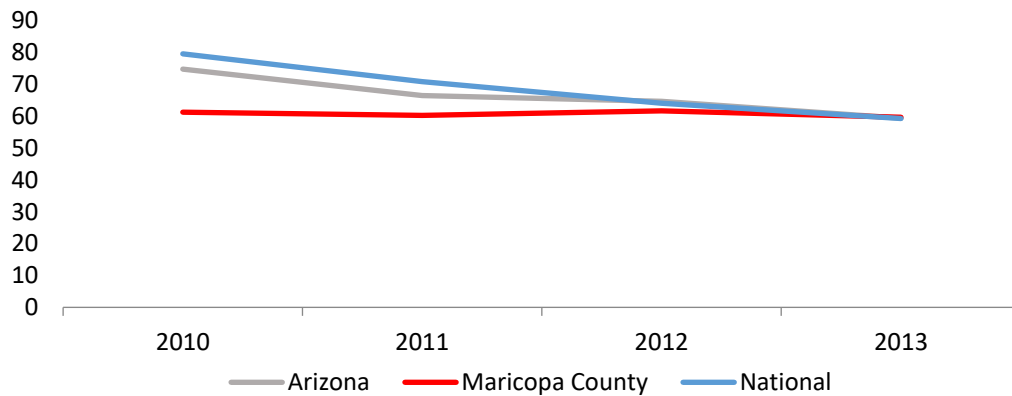


(Arizona Criminal Justice Commission, n.d.)

Table: Rate per 100,000 of Juvenile Arrests from Total Property Crimes, 2010-2013

	2010	2011	2012	2013
Arizona	601.4	555.2	466.1	419.9
Maricopa County	528.3	505.4	424.6	395.8
National	391.3	351.1	313.0	269.9

**The rate of juvenile arrests from total violent crimes in Maricopa County has remained steady from years 2010-2013.**

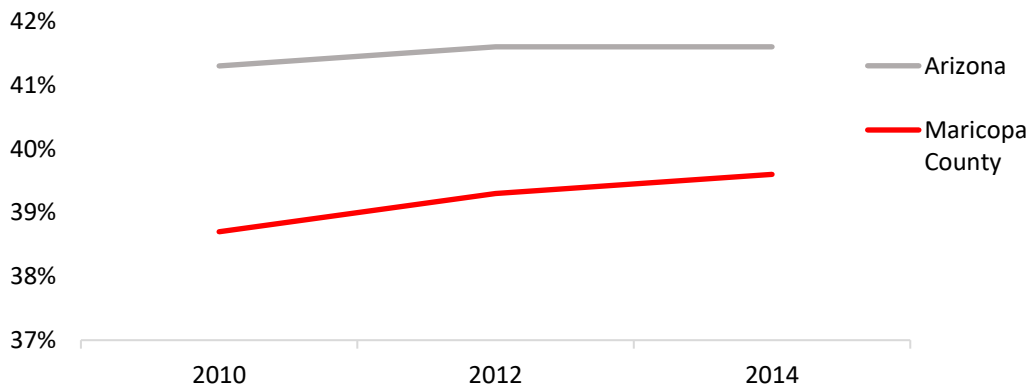


(Arizona Criminal Justice Commission, n.d.)

**Table: Rate per 100,000 of Juvenile Arrests from Total Violent Crimes, 2010-2013**

	2010	2011	2012	2013
Arizona	74.8	66.5	64.7	59.4
Maricopa County	61.3	60.3	61.7	59.7
National	79.6	70.9	64.1	59.3

**The percentage of Maricopa County youths reporting a low neighborhood attachment is lower than what Arizona youth report.**

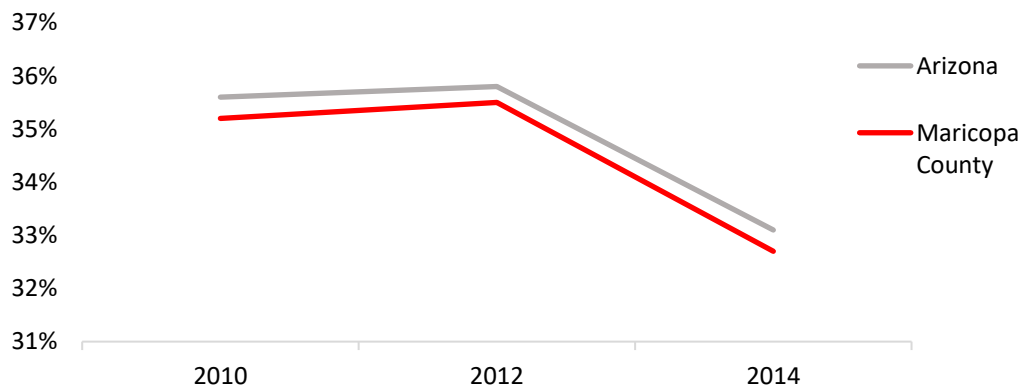


(Harrison, 2014), (Arizona Criminal Justice Commission, 2012)

**Table: Percent of Youths with Low Neighborhood Attachment, 2010, 2012, and 2014**

	2010	2012	2014
Arizona	41.3%	41.6%	41.6%
Maricopa County	38.7%	39.3%	39.6%

**The percentage of Maricopa County youth who perceive there are community rewards for prosocial involvement decreased in 2014.**



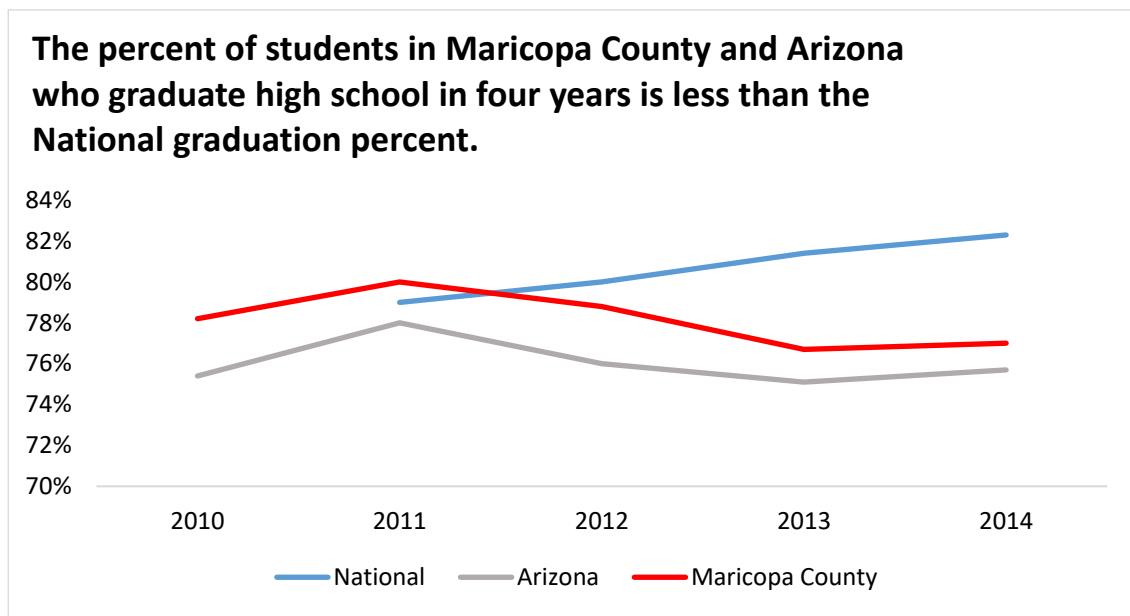
(Harrison, 2014), (Arizona Criminal Justice Commission, 2012)

**Table: Percent of Youth who Perceive there are Community Rewards for Prosocial Involvement, 2010, 2012, and 2014**

	2010	2012	2014
Arizona	35.6%	35.8%	33.1%
Maricopa County	35.2%	35.5%	32.7%

## School and Graduation Rates

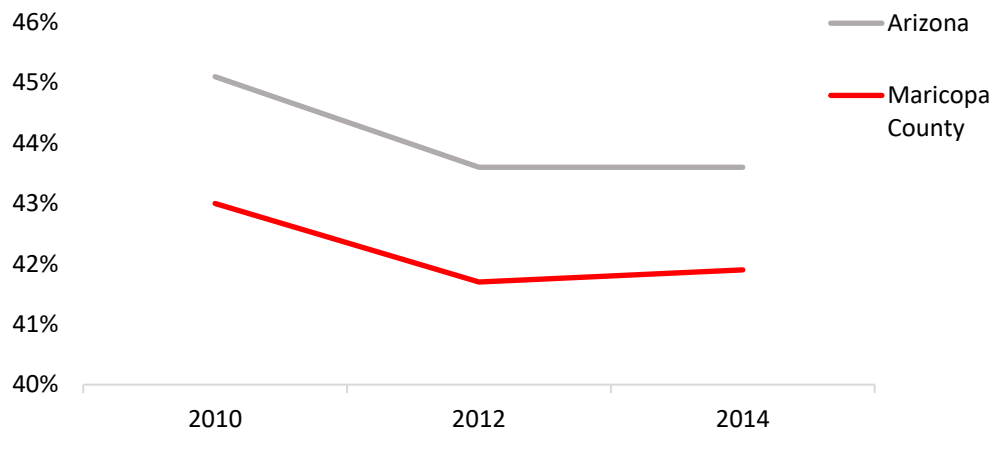
High school graduation rates are a “cohort” measure of four-year graduation. It is calculated for each high school in the determination of their adequate yearly progress (AYP). The graphs below compare students who graduate high school in a timeframe of years. The data looks at National, state and county percentages. The state of Arizona and Maricopa County have a lower percentage of students graduating from high school in four years in comparison to national percentages. In addition, almost 50% of students in Maricopa County and the state of Arizona lack commitment to their schooling.



(University of Arizona, n.d.)

Table: Percent of Students who Graduate High School in Four Years, 2010-2014					
	2010	2011	2012	2013	2014
National	-	79.0%	80.0%	81.4%	82.3%
Arizona	75.4%	78.0%	76.0%	75.1%	75.7%
Maricopa County	78.2%	80.0%	78.8%	76.7%	77.0%

**The percentage of Maricopa County youth considered high risk for academic failure is lower than the high risk youth for Arizona.**

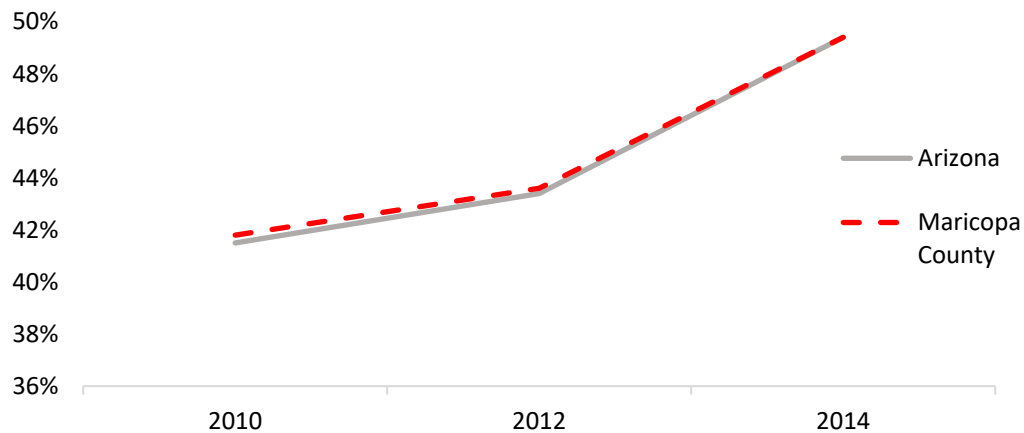


(Harrison, 2014), (Arizona Criminal Justice Commission, 2012)

**Table: Percent of Youth at Risk for Academic Failure, 2010, 2012, and 2014**

	2010	2012	2014
Arizona	45.1%	43.6%	43.6%
Maricopa County	43.0%	41.7%	41.9%

**The percentage of Maricopa County youth with a lack of commitment to school rose in 2014.**



(Harrison, 2014), (Arizona Criminal Justice Commission, 2012)

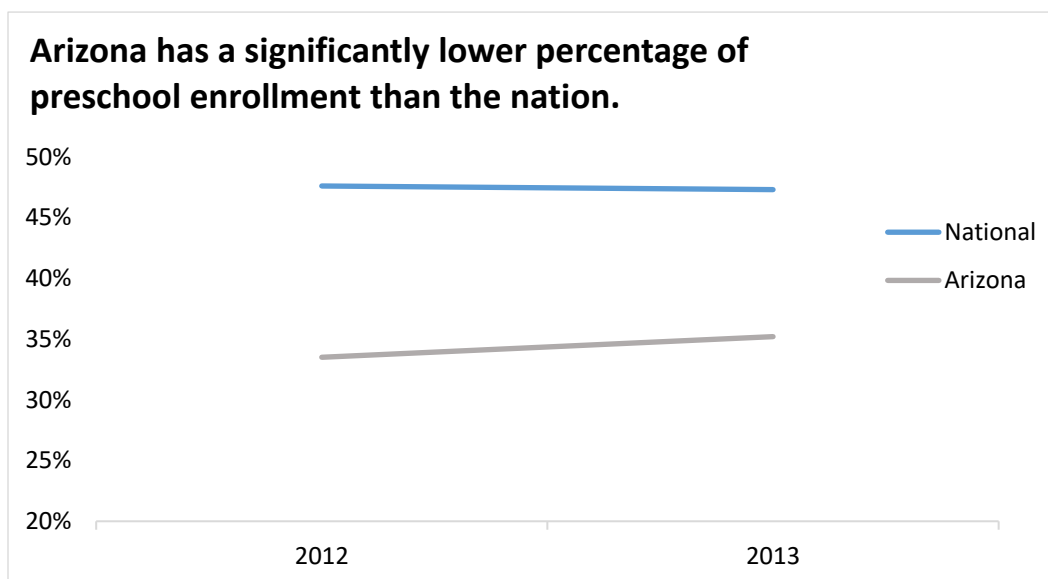
**Table: Percent of Youth with Lack of Commitment to School, 2010, 2012, and 2014**

	2010	2012	2014
Arizona	41.5%	43.4%	49.4%
Maricopa County	41.8%	43.6%	49.4%

## Preschool Data

According to the U.S. Department of Education, 6 out of 10 four-year olds, or 59%, are not enrolled in publicly funded preschool programs. This includes programs through state preschools, Head Start, and special education preschool services. There is an unmet need when it comes to early learning. Data shows that more than 2.5 million four years old do not have access to publicly funded preschool programs. (*U.S. Department of Education, 2015*)

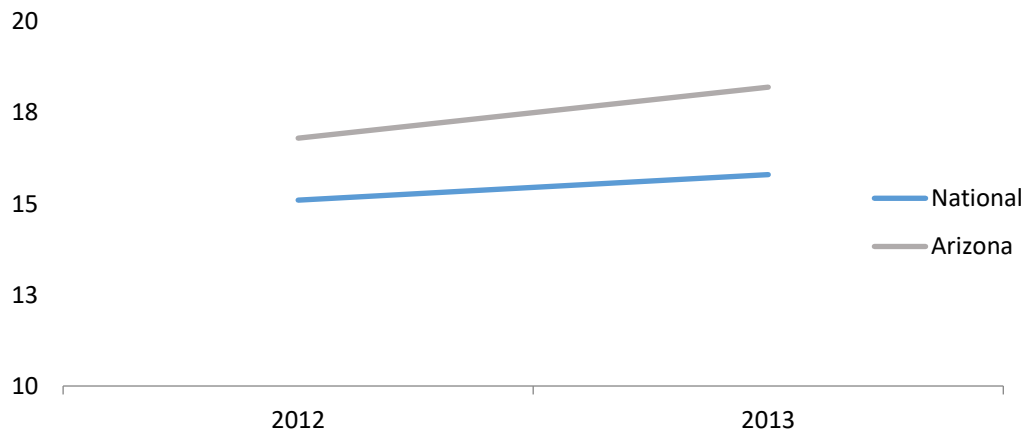
As seen in the graphs below, in 2013, preschool enrollment was 12% lower in the state of Arizona (35%) in comparison to the national rate (47%). In addition, the state of Arizona has seen a 2% increase in preschool poverty gaps from 2012 to 2013.



(Education Week Research Center, 2015), (Education Week, 2017)

Table: Percent of Preschool Enrollment, 2012-2013		
	2012	2013
National	48.0%	47.0%
Arizona	34.0%	35.0%

**The state of Arizona has seen a 2% increase in the preschool poverty gaps from 2012 to 2013.**



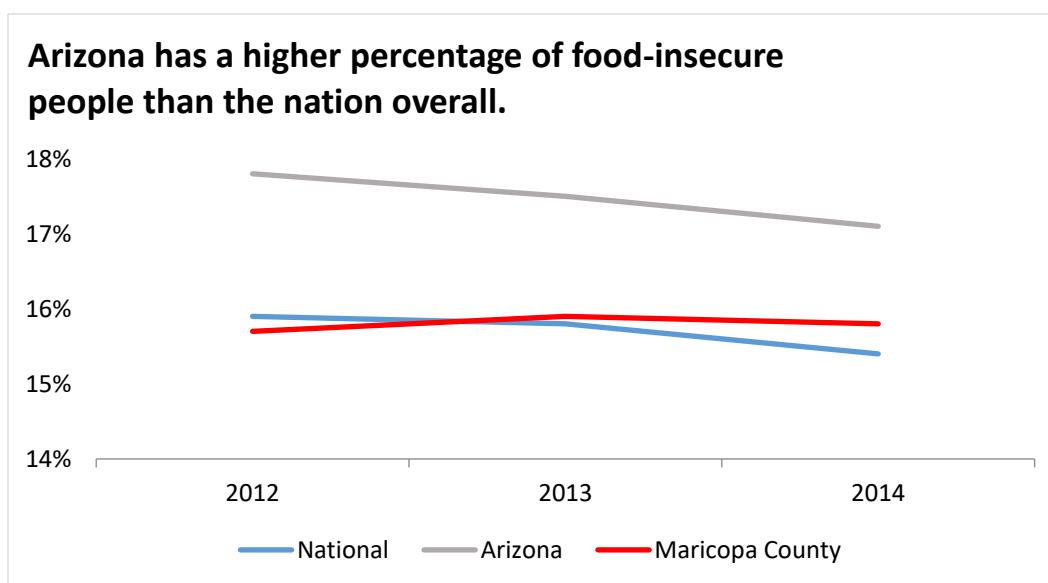
(Education Week Research Center, 2015), (Education Week, 2017)

Table: Preschool Poverty Gap (rate per 100,000), 2012-2013		
	2012	2013
National	15.1	15.8
Arizona	16.8	18.2

## Food Insecurity

In 2015, 13.1 million children lived in food-insecure households and Arizona was rated one of the top five states with the highest rate of food-insecure children under 18. (*Feeding America, 2017*)

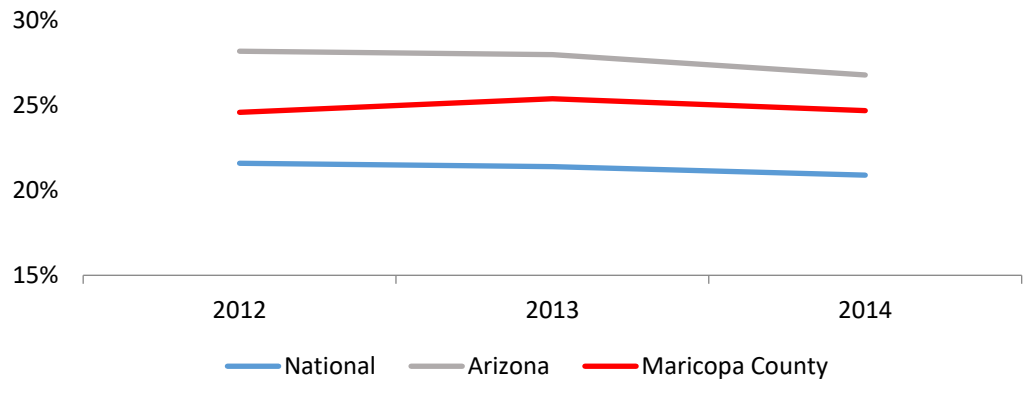
Feeding America describes food insecurity as an inability to provide enough food for every person in a household. Working families in the United States face innumerable situations that result to food insecurity and hunger. Currently, the United States faces the struggle of hunger in 1 in 8 people. Food insecurity creates various impacts depending on each individual. Some effects of food insecurity include serious health complications when forced to choose between paying for food and healthcare, and a child's inability to learn and grow. (*Feeding America , 2017*)



(Feeding America, n.d.)

Table: Percent of Population Food Insecure, 2012-2014			
	2012	2013	2014
National	15.9%	15.8%	15.4%
Arizona	17.8%	17.5%	17.1%
Maricopa County	15.7%	15.9%	15.8%

**Arizona and Maricopa County have a higher percentage of food-insecure children than the nation overall.**



(Feeding America, n.d.)

Table: Percent of Children Food Insecure Children, 2012-2014			
	2012	2013	2014
National	21.6%	21.4%	20.9%
Arizona	28.2%	28.0%	26.8%
Maricopa County	24.6%	25.4%	24.7%

## Next Steps

The findings from this report, along with the other three sections of the MAPP assessments, will be utilized to pick priority strategic issues for 2018-2021. The chosen priority strategic issues will be included in the updated Community Health Improvement Plan 2.0 (CHIP) and the data findings and results will be shared through the Maricopa Health Matters website, HIPMC meetings, traditional and social media outlets, public forums and community hearing sessions.

## Appendix A

Maricopa County Community Health Assessment for Population Health Improvement: Recommended Health Metrics *4/7/16*						
Health Outcome Metrics		Health Determinants and Correlated Metrics				
<i>Mortality</i>	<i>Morbidity</i>	<i>Access to Healthcare</i>	<i>Health Behaviors</i>	<i>Demographics</i>	<i>Social Environment</i>	<i>Physical and Built Environment</i>
Leading Causes of Death	Hospital Utilization	Health Insurance Coverage	Alcohol, Tobacco and Other Drug Use	Age	Domestic Violence and Child Abuse	Environment
Infant Mortality	Cancer Rates	Provider Rates	Physical Activity	Sex	Violence and Crime	Housing
Injury-related Mortality	Obesity	Quality of Care	Nutrition	Race/Ethnicity	Social Capital/Social Support	Transportation
Motor Vehicle Mortality	Low Birth-weight	Health Literacy	Unsafe Sex	Income	Education System	Food Access
Suicide	Infectious Diseases		Seatbelt Use	Poverty Level	Early Childhood Development	Recreation Access
Homicide	Motor Vehicle Injury		Preventive Healthcare Utilization	Educational Attainment	Health Equity	
Substance Use/Abuse Mortality	Overall Health Status		Healthcare Utilization	Employment Status		
	Chronic Disease Prevalence			Immigration		
	Mental Health Condition Prevalence			Language Spoken at Home		
				Homelessness		

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